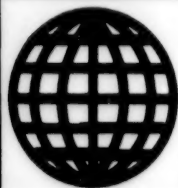


JPRS-TND-94-019

17 October 1994



**FOREIGN
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JPRS Report

Proliferation Issues

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PROLIFERATION ISSUES

JPRS-TND-94-019

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17 October 1994

[NOTE TO READERS: Effective 1 October, the processing indicators appearing in brackets at the start of each item will be changed. All new indicators will begin with "FBIS" to make the material more easily identifiable. Some will also indicate whether the item has been translated from the vernacular or transcribed from English.]

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

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SOUTH AFRICA

Government Asks Other African Countries To Eliminate Chemical Weapons

*MB2409160994 Johannesburg SABC TV 1 Network
in Afrikaans 1800 GMT 12 Sep 94*

[FBIS Translated Text] The government has asked African countries to assist in freeing the continent of chemical weapons. Delegations from several African countries are attending a South African-initiated conference in Pretoria this week aimed at recruiting support for the International Chemical Accord. Linda van Tilburg has the report. [begin recording]

Linda van Tilburg: The devastating effect of chemical weapons was first noticed on a large scale in World War I when the Germans used mustard gas against the allied forces. Chemical weapons have since been used in Vietnam and the Iran-Iraq war, and there had been allegations of chemical warfare in Angola. There also

have been reports of possible Armscor [Armaments Corporation of South Africa] arms sales to Iraq.

To control chemical weapons, a chemical weapons accord was signed in 1993. One-hundred-and-fifty-seven countries became members of this agreement, but it will only go into force next year. Today, Deputy Foreign Affairs Minister Aziz Pahad once more reiterated that South Africa was committed to a policy of disarmament and arms control. He said South Africa would get the Chemical Weapons Convention, which it signed last year, ratified by Parliament.

Pahad in English: We see the signing and ratification of the chemical weapons convention by African states as an important step in strengthening cooperation throughout our continent in freeing Africa from the threat of weapons of mass destruction, and in promoting peace.

Van Tilburg: Pahad said, however, that South Africa would ensure that the control of chemical weapons would not lead to developing countries being held back from important technology. [end recording]

Minister Says Beijing Will 'Strictly Carry Out' CBW Convention

HK1009084894 Beijing ZHONGGUO XINWEN SHE
in English 0947 GMT 9 Sep 94

[FBIS Transcribed Text] Beijing, September 9 (CNS)—Ms. Gu Xiulian, Minister of Chemical Industry, stated at a press conference that China would strictly carry out the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction.

In 1993, the Chinese government signed the Convention and promised under no circumstances China would develop, produce, obtain, store, possess, transfer and use chemical weapons. Nor would China make any military preparations for the use of chemical weapons.

Ms. Gu said China had no chemical weapons but had a chemical industry. The Ministry of Chemical Industry had done a lot of work in implementation of supervision and control over the production, process, consumption, and import and export of chemical compounds as well as inspection on relevant equipment required by the Convention.

She also said that the Ministry had held a working meeting on implementation of the Convention on the prohibition of chemical weapons in May. A special office in charge of such work had been established. The Ministry, along with other departments, have finished preparations for domestic legislation required by the Convention.

Regulations on Nuclear Materials Transportation Announced

OW1409125494 Beijing XINHUA Domestic Service
in Chinese 1138 GMT 14 Sep 94

[FBIS Translated Text] Beijing, 14 Sep (XINHUA)—State organs in charge of nuclear energy recently promulgated the "Regulations Governing the Protection of Nuclear Materials in Kind During International Transportation."

According to sources, China joined the international "Convention of Protecting Nuclear Materials in Kind" in 1989. For the sake of executing the convention and fulfilling the obligations of a signatory, competent Chinese Government authorities—the Ministry of Public Security and state organs in charge of nuclear energy—formulated the regulations on 12 July this year.

The regulations state in explicit terms that operating international transportation of nuclear materials must have the approval of competent state authorities, a licensing system shall be instituted, and all units and individuals without the approval of competent state authorities may not possess, transfer, or transport nuclear materials; that the passage and transportation of nuclear materials may not be conducted in China without the approval of competent Chinese Government authorities; that those who accept, possess, transfer,

replace, and dispose of nuclear materials without legal authorization shall have their legal liabilities investigated; and that stealing nuclear materials as well as obtaining nuclear materials through fraud and extortion constitute criminal conduct punishable by the law.

The regulations have detailed provisions governing the responsibilities, management, protection categories and measures, and legal responsibilities of organs in charge of transportation of nuclear materials. The regulations will become effective on 15 September 1994.

Government 'Resolutely Supports' Biological Weapons Ban

OW2009170394 Beijing XINHUA in English
1643 GMT 20 Sep 94

[FBIS Transcribed Text] Geneva, September 20 (XINHUA)—China resolutely supports the ban on biological weapons by faithfully and comprehensively implementing its obligations under the Biological Weapons Convention, a senior Chinese official said here today.

Hou Zhitong, head of the Chinese delegation to a special conference of the states parties to the Convention on the Prohibition of Biological Weapons, made the remarks on Tuesday [20 September]. The 12-day conference was convened on Monday.

Hou said that new progress in the international disarmament field was achieved in recent years and, following the Biological Weapons Convention, the Chemical Weapons Convention came into being through the joint efforts of the international community.

China is among the first signatories of the convention which bans chemical weapons of mass destruction.

"China has all along stood for the complete prohibition and thorough destruction of all weapons of mass destruction and believed that it is the common goal which should be pursued by the whole mankind," Hou said.

He added that before the realization of this final goal, all the nuclear-weapon states should undertake unconditionally not to be the first to use nuclear weapons and not to use or threaten to use nuclear weapons against non-nuclear weapon states and nuclear-weapon-free zones.

On the biological weapons convention, Hou said, "China resolutely supports the objective of prohibiting biological weapons by faithfully and comprehensively implementing its obligations under the convention."

He said, "China is devoted to the strengthening of the universality and effectiveness of the Biological Weapons Convention and is in favour of adopting appropriate measures to achieve this purpose."

China has submitted every year to the United Nations its report on the data and information in connection with the convention.

Hou emphasized that the implementation of any international treaty should not be selective.

He said, "full implementation of the relevant articles of the convention on the strengthening of international cooperation and exchange in peaceful uses of biotechnology would be helpful to the economic and social development of all states parties and beneficial as well for the enhancement of the universality and authority of the convention."

Therefore, Hou said, sufficient attention should be attached to this issue so as to meet the legitimate concerns and requests from numerous states parties.

Hou asked countries with advanced technology to take specific measures to promote technology transfers and trade in the field of peaceful uses of biotechnology.

In conclusion, Hou expressed the hope that with the future progress in the strengthening of confidence-building and compliance measures for the implementation of the convention, the international cooperation and exchange of biotechnology should also be further advanced.

Official on Beijing's Stand on Biological Weapons Ban

OW2109021594 Beijing XINHUA Domestic Service
in Chinese 1555 GMT 20 Sep 94

[By reporter Ban Wei (3803 3837)]

[FBIS Translated Text] Geneva, 20 Sep (XINHUA)—Addressing a special conference of the Biological Weapons Convention today [20 September], Chinese Ambassador on Disarmament Affairs Hou Zhitong said China resolutely supports the objective of the ban on biological weapons and is in favor of adopting appropriate measures to enhance the universality and effectiveness of the convention.

Hou Zhitong said: International disarmament has made new progress in recent years. Following the Biological Weapons Convention, the Chemical Weapons Convention came into being through the joint efforts of the international community. China has all along supported the purpose and objective of the Chemical Weapons Convention and was among the first batch of its signatories. China looks forward to the Chemical Weapons Convention going into effect at an early date.

Hou Zhitong said: China has all along stood for the complete ban and thorough destruction of all weapons of mass destruction, and firmly believes this is the goal mankind should pursue. The international community should make continued efforts on the basis of the Biological Weapons Convention and the Chemical Weapons Convention to bring about a complete ban on and total destruction of the weapons of mass destruction as soon as possible, and to usher in a new nuclear weapons-free era for mankind.

Commenting on the Biological Weapons Convention, Hou Zhitong pointed out: China resolutely supports the objective of the ban on biological weapons; always

faithfully fulfills all the obligations it has undertaken under the convention; and has each year submitted to the United Nations its data and situation report dealing with the convention.

He also stressed: The implementation of any international treaty should not be selective. China has always believed that conscientiously implementing relevant articles of the convention and strengthening international cooperation in and exchange of the peaceful use of biotechnology will be helpful for every country's economic and social development, and conducive to enhancing the universality and authority of the convention. Due importance should be attached to the reasonable concerns expressed by many countries and their requests.

The special conference of the Biological Weapons Convention opened on 19 September and will end on 30 September.

Report Details 'Strategic Change' in Nuclear Industry

OW2509014594 Beijing XINHUA in English
0106 GMT 25 Sep 94

[By Li Zhurun and Han Zhenjun: "Nuclear Industry Completes 'Strategic Change'"]

[FBIS Transcribed Text] Beijing, September 25 (XINHUA)—Most of the 300,000 employees involved in China's nuclear industry have evacuated from their bases in deserts or mountains for cities or coastal areas, indicating completion of a "strategic change" for the industry which used to concentrate on military production but has switched more and more to civilian needs.

"For decades the industry was kept in tight secrecy, and it is now serving peaceful purposes and opens to the world," said Jiang Xinxiong, general manager of the China National Nuclear Corporation (CNNC).

CNNC, a large industrial enterprise group directly under the State Council, is the successor of the Ministry of Nuclear Industry which built China's first atom bomb, hydrogen bomb and nuclear submarine.

"Most of the nuclear factories are closed or have stopped operation," Jiang said. "Military production has been reduced to the minimum on state orders. The bulk of the industry is serving the needs of China's economic construction and people's daily needs."

Goods and services provided by CNNC for civilian use now account for 75 percent of CNNC's gross output which has grown at an annual average rate of 30 percent since the nation started to implement the policy of reform and opening to the world in 1979.

The industry is producing 1,500 kinds of products, ranging from metal fault detectors to fire alarms which use radioactive materials, as well as things not related to nuclear technology, such as chemical fertilizers.

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Nevertheless, said Jiang, "Development of nuclear electric power is our main task."

China now has two nuclear power stations in commercial production—the 300,000 kw Qinshan station in Zhejiang Province designed and built by itself and the Dayawan station with two 900,000 kw generating units which were imported from France and Britain.

"The enthusiasm in building nuclear power stations is growing," he said. "Fifteen provinces and municipalities, including Liaoning, Jiangsu, Shandong and Shanghai have expressed their wish to build such power stations or are making preparations for their construction."

To prepare the country for the next century, the "era of nuclear power," China is building a network of factories producing nuclear fuel and fuel elements, the heart of nuclear electric power station reactors.

"China will keep a task force of nuclear scientists and engineers to be commensurate with its status as a nuclear power, and development of nuclear electricity in part serves that purpose," said Jiang, who doubles as director of China's State Atomic Energy Agency.

China has sold to Algeria a heavy water reactor for research, and is building a 300,000 kw nuclear power

station for Pakistan. In line with the principle of using atomic energy for peaceful purposes, it has relations of nuclear exchanges and cooperation with more than 40 countries, and CNNC has trade relations with over 100 companies throughout the world.

Beijing Reportedly Willing to Store DPRK's Used Fuel Rods

*SK2609000194 Seoul KBS-1 Radio Network in Korean
2100 GMT 25 Sep 94*

[FBIS Translated Text] China is prepared to accept and store the used nuclear fuel rods if North Korea agrees to the transfer of such fuel rods to a third country, and other countries bear the expenses for it. The ROK Ministry of Foreign Affairs stated, in a report submitted to the National Assembly, that although China rejected the U.S. request to accept and store North Korea's used nuclear fuel rods, China expressed a willingness to consider it when the said conditions were met.

The report also states that the Chinese Government has no objection to whether the light water reactor to be provided for North Korea is the ROK-type or the Russian type.

JAPAN

Tokyo, Moscow Open Talks on Weapons Export Controls

OW2609085194 Tokyo KYODO in English 0822 GMT 26 Sep 94

[FBIS Transcribed Text] Tokyo, Sept 26 KYODO—Japan and Russia opened negotiations in Tokyo Monday [26 September] on ways to prevent the proliferation of weapons of mass destruction and related materials.

Government officials said the three-day session at the Foreign Ministry is part of international efforts to work out a framework to control the international weapons trade.

A new international export controls organization is scheduled to be inaugurated this fall to replace the Coordinating Committee for Export Control to Communist area (Cocom), which was created by Western nations to control exports of strategic goods to communist nations during the Cold War era.

Russia is known as a major weapons exporter.

The officials said representatives from Japan and Russia will exchange views on export control systems in their respective nations and discuss ways to effectively manage the new organization.

The Japanese delegation consists of officials from the Ministries of Foreign Affairs, International Trade and Finance as well as customs officials.

The Russian party includes officials in charge of customs and external trade and economic relations, the officials said.

NORTH KOREA

Pyongyang Seeking To Buy German Nuclear Reactors

AU0809082694 Frankfurt/Main FRANKFURTER ALLGEMEINE in German 8 Sep 94 p 1

[FBIS Translated Text] Frankfurt/Main, 7 September—North Korea wants to buy light-water reactors from Germany to expand its nuclear energy production. This newspaper was told so by a spokesman of Pyongyang's representation in Berlin on Wednesday [7 September]. According to him, the U.S.-North Korean talks about the controversial nuclear policy of the communist regime in Pyongyang were shifted to Berlin at Pyongyang's express request in order to affirm its intention to ask for German offers. These talks are to begin this Saturday [10 September] and are to be held parallel to negotiations which the Americans and the North Koreans intend to hold in Pyongyang about the establishment of diplomatic relations. The previous meetings of the delegations from the two countries took place in New York and Geneva. Last week the North Korean leadership rejected an offer by South Korea to supply such light-water reactors.

Plutonium Extraction Reportedly Suspended in February 1993

SK1109130394 Seoul KBS-1 Television Network in Korean 1200 GMT 11 Sep 94

[FBIS Translated Text] For the first time, it has been confirmed that the DPRK has not extracted additional plutonium from its radiochemical laboratory in Yongbyon since February 1993. This was disclosed by an International Atomic Energy Agency [IAEA] report exclusively obtained by Korean Broadcast Service reporters on the results of the IAEA's inspection of North Korea.

The report stated that the IAEA precisely analyzed the nuclear samples taken from the radiochemical laboratory in March and May, but had not discovered any signs of reprocessing. However, there are new suspicions that the DPRK may have reprocessed the fuel rods at its second reprocessing facility [chaechori isoll], which is newly under construction, because it did not allow IAEA inspectors access there; North Korea gave as its excuse for not allowing access to this facility that construction of the facility, though advanced, has not yet been completed.

It has also been confirmed for the first time that Pyongyang did not allow IAEA inspectors access to the nuclear fuel molding [songhyong] plant and nuclear fuel depots, breaking the February U.S.-DPRK agreement which stipulates that North Korea will accept inspections of its seven major nuclear facilities. The inspectors who are now carrying out their activities in Yongbyon stated that, because of this, they cannot confirm if the new nuclear fuel rods have been removed from the nuclear fuel depots to be placed into the five-megawatt nuclear reactor. The IAEA will open the Board of Governors' meeting tomorrow afternoon and will discuss the North Korean nuclear issue based on the report. Then, it will urge the DPRK to fully cooperate with the nuclear inspections.

Pyongyang Can Produce 100-150 Scud Missiles Per Year

SK2609094694 Seoul YONHAP in English 0839 GMT 26 Sep 94

[FBIS Transcribed Text] Seoul, Sept. 26 (YONHAP)—North Korea has already set up a system to mass produce Scud-B and Scud-C missiles, which have a maximum range of 500 kilometers, the National Unification Board (NUB) said Monday.

According to inspection data submitted by the NUB to the National Assembly Foreign Affairs and National Unification Committee, North Korea has the capacity to produce 100-150 Scud missiles a year.

Furthermore, Pyongyang has even carried out experiments on human beings in an attempt to develop chemical and biological weapons, the nub said.

Last year Pyongyang succeeded in test-firing the Nodong-1 missile (Scud-D), which can travel about 1,000 kilometers, and is expected to complete developing the Nodong-2 missile, whose maximum range is 1,500-2,000 km, by the end of 1995.

The NUB attributed Pyongyang's efforts to develop long-range guided missiles to its judgment that maintaining military superiority is impossible with its current weapons systems due to the huge economic gap between South and North Korea.

Because of this reason, North Korea is also developing chemical and biological weapons, according to the NUB data.

The hard-line communist country has produced about 1,000 tons of chemical and biological weapons through experiments on political prisoners, enabling it to reach third place on the global list of chemical and biological war potential.

North Korea operates eight plants that manufacture chemical and biological weapons as well as six storage facilities and three research institutes on biological arms. Pyongyang has the ability to launch those weapons from land, air and sea.

The NUB proposed that if inter-Korean talks on disarmament resume, North Korean development of long-range guided missiles and chemical and biological weapons should be dealt with first.

The South-North Korean basic agreement prescribes that the two Koreas discuss phased disarmament, including the problem of dismantling weapons of mass destruction.

The cash-starved North obtains most of its foreign exchange through weapons exports, which accounted for about 30 percent of the country's total exports of 20,440 million U.S. dollars between 1980 and 1993.

Book Details Testing of Nuclear Weapon in Russia, Ukraine

*SK2809085394 Seoul CHOSON ILBO in Korean
27 Sep 94 p 2*

[FBIS Translated Text] Yi Chung-kuk (26), who worked as a sergeant in the nuclear-chemical defense department under the General Staff of the Ministry of People's Armed Forces in North Korea, and who defected to the ROK last March, published in Japan on 21 September a collection of essays entitled "Kim Chong-il's Nuclear Program and the Army." In this book, Yi Chung-kuk testified that North Korea's possession of nuclear weapons cannot be denied. The book was also published in English by Kodansha in Japan. In the book, he presents evidence he personally experienced, including his witnessing of a test of a triggering device for a nuclear weapon [haek pokpal kipokchangchi sirhom]. Yi, who is proficient in English, translated English documents

regarding nuclear-chemical warfare as well as inspections by the International Atomic Energy Agency [IAEA].

The gist of the eyewitness accounts presented by Yi Chung-kuk pertaining to North Korea's nuclear program is as follows:

On 20 October 1993, a test of a triggering device for a nuclear weapon was conducted in the mountains in Sogam-ri, Pyongwon County, South Pyongan Province. At dawn that day, Yi rode in a car with the head of the reconnaissance department after the core members departed.

The testing ground was located deep in the mountains where civilians are unable to go. The mock nuclear test [haek moui sirhom] was to test the triggering device for a nuclear weapon, which was developed by the Nuclear Defense Department in the nuclear complex [haek tanji] in Yongbyon, and to test the plutonium 238 which was extracted, under the participation of researchers.

The test began at 0900 [0000 GMT] in the morning and continued until evening. About 30 officers, including the director of each department under the General Staff, participated. They observed the test by wearing special contamination-proof clothes in a concrete-supported underground building about 100 meters from the site of the explosion.

Yi was supplied with anti-contamination clothing; he witnessed the test along the upper ridge line of a hill where no officers were present. He stuck his face out from the inside of the air-raid shelter when suddenly there was a "bang" along with the sound of flames.

An automatic nuclear explosion observation device [cha-dong haekpokpal kwanchukki] brought by the Nuclear Chemical Defense Bureau was installed on the spot. After the test, researchers and officers who came from Yongbyon expressed satisfaction, saying: "The test was a success." On his return trip in Choe Yong-kwan's car, the director of the reconnaissance department, Choe, who was very happy, said to Yi: "When compared with tests held on other occasions, this test was the most successful."

In July 1992, the DPRK conducted nuclear tests first in Russia and then in Ukraine. After Yongbyon's nuclear facilities were photographed by U.S. satellites, the DPRK could no longer conduct nuclear tests within North Korea. Pyongyang requested Russia allow underground nuclear testing, but was refused. Thus, Kim Chong-il planned to conduct three nuclear tests, but conducted only two, the first test in Russia and the second in Ukraine.

After that, Yi typed a report stating "a nuclear test using a total of 0.5 kilotonnes of nuclear material (one fortieth the atomic bomb used in Hiroshima) was successfully conducted." It was the Nuclear Defense Director's report on his overseas trip. The test evaluation report was submitted to Kim Chong-il.

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The contents included the date of departure, number of personnel involved and their posts, and the objective of the test. The report stated the objective of the test was to test the performance of the automatic nuclear explosion observation device and the nuclear material developed in the Yongbyon complex. The report added that in order to improve the performance of the automatic nuclear explosion observation device, parts must be imported from Russia or Japan. The report was typed in early August, 1992.

On 12 March 1993, tensions were heightened inside North Korea's military following the DPRK's announcement of its withdrawal from the Nuclear Nonproliferation Treaty and the declaration of a semi-war status. Yi's direct superior, Chief Hwang, encouraged them by saying: "We built some fortresses in the valleys along Kuryong River (the river that crosses Yongbyon nuclear complex) and dug tunnels there. Nuclear weapons are being produced and stored in the tunnels. Therefore, you do not have to worry too much about war." Yi feels certain nuclear weapons are hidden in underground tunnels in the valleys along the Kuryong River.

U.S. Accused of Violating Nonproliferation Treaty
SK2909111194 Pyongyang KCNA in English
1058 GMT 29 Sep 94

["Who Is the Real Criminal in Nuclear Threat"—KCNA headline]

[FBIS Transcribed Text] Pyongyang, September 29 (KCNA)—The United States transferred nuclear technologies developed at the facilities for producing nuclear weapons to Japan from 1987, violating the Nuclear Non-Proliferation Treaty [NPT], according to Greenpeace, an international environmental group. Now it can no more be concealed that the United States has assisted Japan by stealth in her nuclear armament from long ago and that Japan has approached its goal of nuclear armament with the help of the United States.

This fact clearly proves who is the real violator of the NPT, a NODONG SINMUN analyst today says, and continues:

The very ones presenting a nuclear threat to humankind are the United States and Japan.

Acting the "nuclear judge," the U.S. and Japan have let no chance pass by without loudly crying that the non-nuclear states must observe the NPT. But the U.S.-Japan conspiracy in nuclear weapon manufacture has dragged their hypocrisy into the light of day.

Haste of Japan in nuclear armament with U.S. patronage is fraught with a serious danger. The Japanese military forces are asserting the need of nuclear weapons, contending that Japan was defeated in the war "because she was not strong". It is the intention of the Japanese ruling circles to realize their ambition for dominating Asia which they could not achieve in the past, by turning Japan into a nuclear power with the backing of the United States.

Japan's desperate efforts to get a permanent seat of the U.N. Security Council are aimed at legally holding a position of nuclear power like the other permanent members.

The nuclear armament of Japan can no longer be denied before the world.

MINJU CHOSON comes out with a commentary titled "The Very One Responsible for Proliferation of Nuclear Weapons".

The analyst says:

Today when the United States has completed the nuclear armament of Japan, it is not helpful to the non-proliferation of nuclear weapons, even if it declares its suspension of nuclear cooperation with Japan.

The United States, a nuclear weapon state, must apologize to the world for having threatened the non-nuclear states with nuclear weapons and illegally transferred nuclear weapons technologies to Japan and other countries and bear responsibility for the consequences.

The Japanese authorities, he stresses, must not eye a permanent [words indistinct] Security Council, which is something unbecoming to Japan, but sincerely liquidate her past, first of all [words indistinct] and frankly open to the public her nuclear armament scheme and give it up at once.

SLOVAKIA**Uranium Seized on Border With Hungary**

*LD2809185494 Bratislava Rozhlasova Stanica
Slovensko Network in Slovak 1730 GMT 28 Sep 94*

[FBIS Translated Excerpt] Yesterday, police at the Slovenske Nove Mesto border crossing with Hungary became witnesses and participants in an event that does not happen every day. They intercepted a delivery of a radio-active substance worth over 1 million crowns. Thus, following in the footsteps of heroin smugglers, in our country there emerge others who are testing their luck—or fate. Bibiana Gunisova learned more details about this case from Jaroslav Pilat, spokesman of the Police Corps Presidium. [begin Gunisova recording]

Gunisova: First, we should perhaps make it clear who was transporting the radio-active substance.

Pilat: Our officers detained the occupants of a VAZ motor vehicle, including four passengers, one of them being a 30-year old woman. The age of the remaining passengers is between 27 and 39 years. The three men are Slovak subjects. They were transporting 1.5 kg of uranium. They were smuggling this highly radio-active substance in a cache under the back seat. The substance was hidden in a special case. Our police staff, who check in cooperation with the customs staff, carried out a check and discovered the case. [passage omitted—spokesman declined to give more details on destination of uranium since the case is still under investigation] [end recording]

ARGENTINA

Past Sales of Weapons, Nuclear Material to Iran

PY0609183094 Buenos Aires LA NACION in Spanish
3 Sep 94 p 8

[Article by Alfredo Vega]

[FBIS Translated Text] Many of the weapons that Iran has been using over the past few years were purchased from Argentina. A considerable amount of the materiel for the development of its current nuclear plan was also manufactured in our country. In some cases shipments were made surreptitiously.

According to opinions within diplomatic circles, relations between the two countries "were always plagued with turbulence."

Early in 1992, these links suffered an abrupt about turn when the government canceled a shipment of machinery and tools to the Atomic Energy Organization of Iran (AEOD). The machinery and tools were manufactured by Invap (Applied Research State Enterprise) at its plant in Bariloche, Rio Negro Province.

The shipment should have been sent on 13 December 1991 aboard the vessel Fathulkhair but, due to pressure from U.S. officials, it was decided that the shipment would be sent on 25 December aboard the vessel Ibn-Tufail that was chartered by the United Shipping Co.

As a consequence of that suspension, Foreign Minister Guido Di Tella had to report on Argentina's nuclear policy to Justicialist Party congressmen. In a public document, Di Tella acknowledged that "we exported until 1989 without worrying who bought from us and we became associated with authoritarian, anti-west regimes."

Reporting that this policy had been scrapped, the foreign minister added: "The new policy will oblige us to reconsider some deals that have already been contracted. If they must be canceled it will be a price that we must intelligently and courageously pay."

Hector Otheguy, the general manager of Invap, stated that the contracts were made with the appropriate authorizations: By the National Atomic Energy Commission with the explicit support of the Foreign Ministry "due to the possible geopolitical connotations."

The shipments of weapons were constant during the Radical [Radical Civic Union] government, and not very much was said about them. Those shipments coincided with the 1980-1988 Iran-Iraq war.

One shipment came to light when the vessel Iran Sadr berthed in Bahia Blanca to load 31,500 tons of sorghum. When inspectors boarded the vessel they noted that the vessel already had a cargo. It was learned later that the cargo comprised 2,000 tons of weapons that had been neatly stockpiled some days earlier in the reserved sector of Puerto Belgrano.

The cargo comprised various types of carbines, 81 and 120 mm mortars, and a large quantity of ammunition.

The materiel usually arrived at the port aboard freight trains that departed from Villa Maria [Cordoba Province], or in fleets of container trucks.

On another occasion, a train stopped for repairs in the city of Rio Cuarto, Cordoba Province. Some pipes, measuring 80 centimeters long and 12 centimeters wide, were observed when a tarpaulin covering one of the cars was unhooked. The pipes were packaged in groups of eight and had a legend written on them which, when translated, said: Defense Ministry of the Republic of Iran. The train continued its journey after a few hours and was apparently heading for the port of San Pedro, but no one wished to officially confirm what the cargo was.

The Iranian foreign minister visited Buenos Aires in May 1987 to meet with then Foreign Minister Dante Caputo and President Raul Alfonsin. Developing countries were at that time promoting a resolution to impose a weapons embargo on Iraq and Iran, and at the same time they were demanding free navigation in the gulf.

Some months later the Defense Ministry denied selling Iran 50 missiles of the Condor type, which have a range of 850 km, and 600 of the Alacran type, which have a range of 150 km. The information had been published in the Italian newspaper CORRIERE DELLA SERA.

Argentina was directly involved in the sale of 5,000 pistols and 60 heavy machine guns. The shipment, which was tagged "technical machinery and spares," was impounded by the Spanish authorities when they inspected an Air Iran jumbo jet that left Buenos Aires en route for Tehran. After a few days the Iranian Government submitted the appropriate documentation and the shipment was released.

At the end of 1985, Argentine officials became enthusiastic with the possibility of selling Iran the missile frigates Hercules and Santisima Trinidad, which had been laid up due to the lack of spare parts. Although denials were issued from some official sectors, Iranian Vice Foreign Minister Javad Mansouri [name as published] confirmed the negotiations, but indicated that the sale did not go through due "to the intervention of the usual interests."

The interest of various Argentine administrations saw trade with Iran as a counterweight because that country was considered one of our main clients as a purchaser of grains and rice. In 1990 a renewable agreement was signed for the sale of between 400,000 and 1 million tons of wheat per year to Iran.

In February 1990, Ambassador Carim Yoma, special affairs secretary of the Foreign Ministry, closed some economic agreements with Iran for the sale of wheat, beef, and fish. When he returned, Yoma said that "this type of operation will put the productive revolution on its feet."

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EGYPT

U.S. 'Double Standard' on Nuclear Weapons Criticized*NC2609090994 Cairo MENA in Arabic 0605 GMT
26 Sep 94*

[FBIS Translated Text] Cairo, 26 Sep (MENA)—AL-AKHBAR criticizes the position of the United States, leader of what is now called the new world order, on various world issues, noting that a policy of double standards is being practiced.

The paper says in an editorial in today's issue that this policy appears clear in the position of the United States, the world's only power, toward North Korea's nuclear capability. While Washington is applying pressure to make North Korea subject its nuclear facilities to international inspection, it is not doing the same to Israel, which possesses nuclear bombs and weapons of mass destruction.

The paper says that President Husni Mubarak's call to free the Middle East of weapons of mass destruction could give the United States a strong excuse to amend its position on Israel's nuclear weapons so that the Middle East peace everyone is trying to establish can be based on strong and firm foundations.

The paper stresses that all world issues should be addressed using a single standard that treats all people equally.

INDIA

Leading Scientist Views Pakistan's Nuclear Capability*BK1209024394 Delhi INDIA TODAY in English
15 Sep 94 p 53*

[FBIS Transcribed Text]

Q. What is your reaction to the reports of Pakistan being involved in the smuggling of plutonium in Germany?

A. The question of Pakistan smuggling or using espionage in the atomic business has always been there. Pakistan's capability, unlike ours, has depended on their ability to get it from others. Now they appear to be going to terrorists and smugglers. The collapse of the Soviet Union is frightening because of the loss of total control over the type of nuclear capability it had. Now the worst thing possible is happening. Its capability is falling into the hands of terrorists and smugglers. What worries me even more is that many Russian nuclear scientists are willing to be mercenaries to whoever is willing to pay the price. That is the greatest danger as they may start backing countries like Pakistan.

Q. Why do you think Pakistan was smuggling plutonium when its programme had taken the U-235 route to making bombs?

A. My surmise is that if they had plenty of Uranium 235, as they have been claiming for a long time, they wouldn't have gone in for this plutonium. From our experience in using centrifuges to enrich uranium we know that these are very difficult to maintain. And given the state of their industrial capability, it is apparent that Pakistan's plant is working nowhere to the capacity planned. Their natural reaction would be, "Ah! This is a chance. Plutonium is going all over the place. Let's pick it up." In the past, Pakistan got plenty of mileage by making tall claims. But that is now turning into only paper mileage.

Q. But its former prime minister Nawaz Sharif has categorically said that Pakistan has the bomb.

A. The problem is that politicians think of only how much power they should hang on to. A statement like that would upset his opponent who is herself in great difficulty. I wouldn't take Nawaz Sharif seriously. I would take the statement of how much plutonium has moved to various places and see how many scientists are moving into the country as better indicators.

Q. If what Nawaz Sharif says is true, does India have the capability to meet such a nuclear challenge?

A. What is capability? To me it is the amount of plutonium a nation has. And we have more than enough. It is also the ability to process it which is quite a difficult thing. We have reprocessing capability but Pakistan doesn't. That's why they are forced to steal plans or buy plutonium. And recently they were caught doing this. The other thing is the implosion techniques and the triggers. We have successfully done this in the first test. Then there is the question of delivery. The old-fashioned delivery technique is by dropping it from an aircraft. Now it is done using missiles. For us, it depends on what kind of tests we want to do. For submarines, for planes, for throwing it at Pakistan or China. These can be easily planned. Because once you engage the first gear, as we have, then putting it into second is simpler. You are asking if the momentum has stopped. It hasn't.

Q. The point is, can we strike back if Pakistan does?

A. For that we have to watch whether they can first strike. It depends on our intelligence. Newspapers say that we can put together bombs quickly if we got to know. Delivery is another matter. In principle, I suppose we could.

Papers Comment on Disclosure of Pakistan Bombs**Threat Taken Seriously***94WP0154A Bangalore DECCAN HERALD in English
26 Aug 94 p 1*

[Article by Nitish Chakravarty: "India Cannot Remain Complacent"]

[FBIS Transcribed Text] New Delhi, Aug 25—Former prime minister Chandra Shekhar has made light of Mr

Nawaz Sharif's explosive disclosure that, official disclaimers notwithstanding, Pakistan does indeed have the dreaded nuke in its arsenal. In Mr Shekhar's perception this does not really make any difference to the geopolitical realities in the sub-continent.

When the erstwhile Pakistani Premier's revelation—to make which he chose a remote place in Azad Kashmir—came up in the Lok Sabha on Wednesday, Mr Chandra Shekhar advised fellow parliamentarians not to get into a tizzy over it. Not many are, however, likely to share his complacency.

Mr Shekhar's point that the Pakistani bomb should not be an excuse for communal elements to whip up an anti-Muslim frenzy in India is unexceptionable. It is nobody's case that Indian Muslims are to be held as ransom for possible misbehaviour by power drunk Pakistani politicians.

How can anyone in India, Hindu or Muslim, Christian or Buddhist, account for the actions of the authorities in Pakistan? But the perceived danger of communal elements taking advantage of Mr Nawaz Sharif's calculated leak to bash up minorities in India can be no excuse for New Delhi not to take note of the threat that Pakistan's possession of nuclear weapons poses to peace in its neighbouring countries, especially to India.

Mr Chandra Shekhar argues that even if one dismisses the disclaimers of Pakistan's establishment as so much gibberish and accepts Mr Sharif's claim as genuine, India has little to fear. In his opinion it is not possible for any country—not only Pakistan and India but others more lethally armed—to deploy the nuclear bomb in today's conditions.

Mr Shekhar's argument is tenable only to the point that no responsible authority would like to trigger the nuclear bomb for the heck of it and play with the lives of millions. But when nuclear bomb-making materials are moving across the world in the suitcases of itinerant salesmen, the nuke's use does not necessarily have to await decisions at the highest governmental level.

The possibility of an accidental flare-up is real. And, worse still, the breed of trigger-happy politicians is increasing rather than diminishing.

Apt Reaction

It was therefore natural for South Block [Indian Parliament] to take note of what Minister of State for External Affairs Salman Khursheed called "the first ever explicit statement by a Pakistani leader who occupied the highest office of government" confirming the possession of an atomic bomb.

Even before he made a statement in Parliament summing up the Government's reaction to Mr Nawaz Sharif's bombshell, Mr Khursheed had gone on record in an Eyewitness current affairs programme that "India must not disbelieve Mr Sharif when he says Pakistan has an atomic bomb."

His statement in Parliament nailed the Pakistani trickery by underpinning the point that it "can no longer maintain a stand of ambiguity about the intentions and true purpose of its nuclear weapons programme." He rightly interpreted the disclosure by the former Pakistani Premier, who is all set to destabilise the Benazir Bhutto Government and capture power again, as "a nuclear threat to India in settling its outstanding differences with us."

Even though the statement was read out by the junior Minister in the Foreign Ministry, it obviously reflected the considered views of the Narasimha Rao Government. The observation that "Pakistan should be forthwith compelled to abandon its nuclear weapons programme and agree to conduct itself within limits" was a notice to the nuclear powers that they must stop equating India and Pakistan in the nuclear arms race.

Mr Nawaz Sharif's disclosure is no hard news but what lends weight to it is that this is the first time that one who has held the office of Prime Minister has confessed that Pakistan does indeed have the dreaded bomb. Until now nitpicking Pakistani officials have struck a distinction between possession of the bomb and capability to make one. "We have the capability but we haven't made it" has been their refrain.

Even after a Pakistani was detained by Berlin police last week in connection with the smuggling of plutonium-239, the Pakistani Ambassador in Germany said they did not need any nuclear bomb making materials as they had already acquired the capability to make the H-bomb.

The catch in the statement wouldn't have missed observers: How does Pakistan know it has the bomb making expertise unless it has made one? Mr Nawaz Sharif has taken neither Washington nor London by surprise. They like the rest of the world have known for long that Pakistan was streets ahead of the rest of South Asia on the road to a nuclear catastrophe.

India's Stand Vindicated

94WP0154B Bombay THE TIMES OF INDIA
in English 20 Aug 94 p 14

[Editorial: "Road to Pakistan"]

[FBIS Transcribed Text] The discovery that the smuggling ring which was trying to market weapons' grade plutonium in Germany has left traces leading to Pakistan ought not to cause much surprise. After all, virtually all of Pakistan's nuclear weapons complex has been fabricated from technology acquired, mostly through illegal means, from abroad. Intelligence officials are perhaps better informed about the means adopted, but sufficient knowledge has been gained from the occasional arrests in the 1980s to show that a large part of the effort was conducted through dummy companies and funded through banks like the BCCI [Bank of Credit and Commerce International]. Given the clandestine nature of the Pakistani effort, there are still crucial gaps in the public

knowledge of the various facets of the programme. It is clear, however, that Pakistan is dependent on a continuous supply of spares and materials from abroad. Given the high quality components needed, most of this can only come from the developed world. But what is not clear is why Pakistan should show any interest in plutonium when it is already said to have mastered the technology for making enriched uranium cores for nuclear weapons. Perhaps its ultracentrifuges which skim weapons' grade U-233 for weapons have not been functioning for want of spares. That could also be the reason why the Pakistanis have been claiming that their production of weapons quality uranium has been capped since 1989.

It is not as though there have been no warnings about the possibility of the breakdown of controls of the nuclear complex in the former Soviet Union. There has been, however, a tendency to ignore them and focus attention instead on the activities of states allegedly threatening regional and world peace through their nuclear programmes. The latest revelations have shown that a much greater danger exists from unchecked activities in countries like Russia and Germany which consider themselves in the forefront of the non-proliferation effort. Moreover, the leakage has also raised the possibility of terrorists obtaining nuclear material for blackmail. Plutonium is not just a core material for nuclear bombs, it is also a highly poisonous substance, a tiny speck of which can cause lung cancer and, mixed with the water supply of a city, a small amount of it can kill thousands of people. India should feel vindicated that it had refused to be browbeaten into signing the NPT [Nonproliferation Treaty] or any regional version with a country that has scant respect for international law. As a country which has always advocated global disarmament and backed realistic interim measures to enforce it, however, India ought to be asking those who have been pushing their own skewed version of non-proliferation whether there is any sanctity in treaties like the NPT or in their technology export regimes that are supposed to prevent the spread of weapons of mass destruction. Equally important is the task of continuing a movement towards comprehensive, global, non-discriminatory elimination of nuclear weapons and the means of making them. Otherwise, no restraints will prevent rogue states as well as terrorists from securing them.

Reaction to Sharif Statement on Pakistan's Bomb

Comments in Parliament

94WP0151A Madras THE HINDU in English
25 Aug 94 p 1

[FBIS Transcribed Text] New Delhi, Aug. 24—The former Pakistani Prime Minister and Leader of the Opposition in the National Assembly, Mr. Nawaz Sharif's reported statement that Pakistan possessed a nuclear bomb provoked an angry reaction in the Lok Sabha today with all sections of the House expressing concern over the threat this posed to India's security.

They saw significance in the fact that Mr. Sharif made the statement while speaking in the Pakistan-occupied Kashmir.

Members urged the Prime Minister, Mr. P. V. Narasimha Rao to consult political leaders while formulating its response to the threatening noises from across the border. The Opposition criticised the Government for not taking Parliament into confidence on matters of national security, and the Leader of the Opposition, Mr. Atal Behari Vajpayee, reiterated his party's demand that India too exercise its nuclear option.

Mr. Vajpayee remarked, amid laughter, that a statement coming from the Leader of the Opposition, whether in India or Pakistan, could not be dismissed easily. The former Prime Minister, Mr. Chandra Shekhar, however, advised restraint saying that if Pakistan's Leader of the Opposition made an "irresponsible" statement it should not necessarily be matched by his Indian counterpart.

The Minister for Parliamentary Affairs, Mr. V. C. Shukla, responding to the demand for a discussion, said he would have "a word with the Prime Minister" and come back to the House. He agreed that the issue should be discussed with party leaders but said the modalities would need to be worked out. The Speaker, Mr. Shivraj Patil, said a decision on the demand for a discussion would be taken after "due deliberation."

Earlier, raising the issue during zero hour, the Janata Dal (G) leader Mr. Chandrajit Yadav said, in an indirect reference to Pakistan, that certain forces in India's neighbourhood were trying to destabilise the country. Pakistan was now openly admitting that it had a nuclear bomb and it had been hinted that it could be used against India.

Describing it as a serious matter, he urged the Prime Minister to make a statement and also consult political leaders on national security concerns—a demand made by all Opposition leaders including Mr. Chandra Shekhar whose was the only voice of restraint in a charged atmosphere. He was against any move that could add to the tension.

The CPI(M)'s [Communist Party of India-Marxist] Mr. Saifuddin Chaudhury called Mr. Sharif's statement "alarming" and said it could not be dismissed lightly considering that he was a former Prime Minister. Demanding a discussion in the House, he wanted to know how the Government proposed to respond to the situation created by Mr. Sharif's disclosure.

The CPI [Communist Party of India] leader Mr. Indrajit Gupta said the report about Pakistan possessing a bomb had come even as that country was encouraging terrorism in many parts of India, the latest being Manipur where Pakistan's intelligence agency ISI [Information Service of India] appeared to be abetting insurgency. He wondered if the Government had a policy at all on such an important issue, and pointed out that every year

Parliament passed defence budgets running into thousands of crores without discussion. Nobody grudged the money, but the House was entitled to know how it was spent.

From the Congress(I), Mr. Ramesh Chennithala and Mr. P. C. Chacko criticised Pakistan for its "aggressive" posture. They referred to reports alleging Pakistan's involvement in smuggling nuclear material from the former Soviet republics, and argued that it should be declared a terrorist state.

The AIADMK's [All India Anna Dravida Munnetra Kazhagam] Mr. P. G. Narayanan said Mr. Sharif's statement contradicted the official Pakistani claim that it did not have a bomb. He appealed to the international community to take note of the statement and impose an "economic blockade" against Pakistan.

Foreign Office Spokesman

94WP0151B Madras THE HINDU in English
25 Aug 94 p 1

[Article by K. K. Katyal: "Utmost Vigilance, Says Govt."]

[FBIS Transcribed Text] New Delhi, Aug. 24—By letting the nuclear cat out of the bag, the former Pakistan Prime Minister, Mr. Nawaz Sharif, has done a great service to India. His confirmation that Pakistan already possessed a nuclear bomb—undoubtedly a matter of serious concern—has hopefully facilitated New Delhi's job in convincing the international community of Islamabad's reckless pursuit of nuclear ambition, evidenced among things, by new reports of clandestine procurement of weapon-grade material.

India is not surprised—it feels vindicated now that Pakistan's nuclear ambitions as also its nuclear delinquency stand exposed. But New Delhi's worry is not any less on this count. On the contrary, there is grave concern—as was reflected in the Lok Sabha today, with agitated members, cutting across party lines, demanding immediate discussion on the threats to the country's security. The Government fully shared their concern.

The Foreign Office spokesman expressed India's worry on the threats of nuclear backup to acts of terrorism. "Pakistan's support to trans-border terrorism and subversion continues, with its open threat to use nuclear weapons as an instrument of policy. It is a matter of grave concern that Pakistan is actively pursuing the nuclear weapon programme and is clandestinely procuring material."

India is not rattled. "We will continue to maintain utmost vigilance," the spokesman assured, "and will take all necessary steps in safeguarding national security." He did not elaborate the point. In the days to come, the nuclear lobby is certain to press the Government to give up its self-restraint and go in for nuclear weapons. However, the official response is unlikely to be more specific. For the present, New Delhi would like the

international community to "compel Pakistan to abandon the dangerous course which will endanger peace and security." "We have long maintained," the spokesman added, "that Pakistan's nuclear programme is weapon-oriented. The curtain of ambiguity over their intention has fallen off. We are dismayed that Pakistan not only has carried its nuclear programme to fruition but also is holding out nuclear threats for settling outstanding bilateral differences."

Mr. Sharif's confirmation could not have come at a more inopportune moment for the ruling establishment in Pakistan. Islamabad had not yet got out of the acute discomfiture caused by reports from Berlin—of the smuggled plutonium finding its way to Pakistan. Despite laboured defensive explanations, Pakistan failed to carry conviction about its nuclear innocence.

The confirmation comes at a time when Islamabad was giving the final shape to its strategy to take the Kashmir issue to the U.N. and had embarked upon intense lobbying in world capitals. This job would become difficult now.

Analyst on U.S. Reaction

94WP0151C Madras THE HINDU in English
26 Aug 94 p 14

[Article by K. K. Katyal: "N-Issue: Gulf With U.S. To Be Bridged"]

[FBIS Transcribed Text] New Delhi, Aug. 25—Those in India who counted on the U.S. administration's opinion to be swayed in New Delhi's favour because of the former Pakistan Prime Minister, Mr. Nawaz Sharif's nuclear admission will need to revise their opinion. The first reaction—by the State Department spokesman yesterday—rested on the assumption of nuclear parity between India and Pakistan rather than on concern over the explicitness of the acknowledgement of nuclear arsenal, or over nuclear threats on the Kashmir issue.

This is the meaning of the reiteration of "high priority" of the U.S. to steps to curb the proliferation of nuclear weapons in South Asia. Also the reference to the April 1994 report on the subject to Congress, especially the administration's belief that both India and Pakistan could assemble a limited number of nuclear weapons in a relatively short time frame. The stress on parity was reflected by another observation of the spokesman—that India exploded a nuclear device in May 1974, and, since 1990, American presidents had been unable to certify non-possession of a nuclear explosive device by Pakistan.

As part of its strategy to meet the new situation, India planned to mobilise the international community over Pakistan's threat to use nuclear weapons for resolving the Kashmir problem. This, India would tell the rest of the world, had added an ominous dimension to Pakistan's conduct in aiding and abetting terrorist activities in Kashmir. The U.S. would be among the first to be

approached, but New Delhi should be prepared for a response on the lines indicated by the spokesmen, with emphasis on high priority for curbing the nuclear menace in South Asia.

Slim indeed are the chances of a change in the U.S. stand—outlined vigorously on various occasions before the Prime Minister, Mr. P. V. Narasimha Rao's visit to Washington, and in a matter-of-fact manner during his talks with the U.S. President, Mr. Bill Clinton. Knowing full well that the divergence between the two sides (on nuclear non-proliferation in South Asia) continued to be sharp, the U.S. chose not to put it on the top of the Clinton-Rao agenda. As a result, the re-statement of their respective positions was followed by a resolve to continue the bilateral dialogue at the official level, that had gone on for nearly two years in terms of the decision taken in January 1991 during Mr. Rao's talks with the then American President, Mr. George Bush.

No dates have so far been fixed for the next round of talks. Till now Washington did not appear in a hurry—obviously because of the cautious approach, based on the awareness of continuing differences. Whether there is a change in this attitude will have to be watched.

India feels vindicated that its view of Islamabad's nuclear ambitions has been confirmed by none other than the one who presided over the Pakistan government till the beginning of last year. It would like the U.S. to take into account what amounts to nuclear back-up to terrorist activities. In case this argument does not impress Washington and there is no appreciation of India's viewpoint, the gulf between the positions of New Delhi and Washington would take longer to be bridged.

IRAN

Hazards of Laxity Regarding Nuclear Issues Examined

NC0309161794 Tehran JAHAN-E ESLAM in Persian
25 Aug 94 p 12

[FBIS Translated Text] Following the discovery of nearly 300 grams of plutonium that was being smuggled from Russia via Germany to an undisclosed destination, the controversy on the control by Russia and all the countries that have seceded from the former Soviet Union on the various nuclear resources that they have attained, has arisen more forcefully than before. The question is: Can the Russian system of control over Kazakhstan and Ukraine, which now have a share in the nuclear resources of the former Soviet Union, inspire the necessary confidence that plutonium, which is used in the manufacture of nuclear weapons, will not be smuggled abroad?

The German security officials have announced that this assurance is waning and cases of the smuggling of nuclear materials affirms these assumptions. Ostensibly the Western world is putting pressure on Russia for more stringent control and ultimately hopes that this

extremely destructive kind of smuggling will be prevented. However, Russia is probably not as concerned as the West on the subject, even though outwardly, it announces tighter controls each time a consignment is seized. The Western countries are apprehensive of the smuggling of nuclear materials for the following two reasons:

First: The possibility of the nuclear materials falling into the hands of Third World countries and breaking the monopoly of the nuclear powers.

Second: This material falling into the hands of those the West labels terrorists.

Of course, the second case appears to be a cause for greater concern. Where would the terrorist groups obtain the necessary technical resources for the production of a nuclear bomb even if we presuppose that they have the necessary funds to do so? Second, it is highly unlikely that smuggling nuclear materials would be possible by these small groups' infiltrating countries that have seceded from the former Soviet Union.

Therefore, the first possibility, that some countries that are seeking nuclear weapons would depend on obtaining the plutonium present in the countries which have broken away from the former Soviet Union, is greater. The Western countries are also more wary of this possibility and some countries have also been named as being involved in the smuggling of nuclear materials via Germany from Russia.

It is not very clear which of the countries mentioned are actually involved in this dangerous adventure and to what extent, but it does seem more plausible to state that the Third World countries that are under immense pressure from the United States to relinquish their own nuclear programs would hardly be seeking to obtain nuclear materials via unusual avenues.

In fact, one must bear in mind that the smuggling of nuclear materials is a far more complicated affair and most countries would certainly think twice before embarking on such a hazardous venture. Countries seeking to gain nuclear weapons would find the illegal channels more to their detriment because of the negative impact of such moves on their international relations.

It is difficult to imagine that there is any government in the Third World that would not be aware of the sensitivity of the Western world toward the possible shattering of their nuclear monopoly.

Iraq's fate may have convinced all the Third World countries on principle that if their nuclear activity reaches the serious level, the West will not sit idly by, and therefore, it does not seem very wise that Third World countries would move toward attaining nuclear materials by smuggling. In any case, an important reality cannot be ignored and that there is no unified stance among the governments in the Islamic world and it is possible that a faction in a Third World country may be

inclined toward obtaining nuclear materials by unconventional means. It can be said that if the reports are true, such factions in power in some countries may be involved. It is obvious that this cannot be attributed to the official policy of governments.

On the other hand, the question arises: Why does Russia not impose the necessary control over its nuclear installations?

There may be various reasons for this. The most important one is that the Russians are knowingly and deliberately using this as a ploy for exerting pressure on the Western world to give aid to Russia by limited smuggling of nuclear materials and turning a blind eye to it. Otherwise, it is difficult to imagine the Russian system of control has become so inept. However, there is also the possibility that the elements in the security apparatus and the system of nuclear control are being manipulated for monetary gains in the distinctive circumstances and disarray prevailing currently in the republics that have declared independence from the former Soviet Union and they have entered into dealings with some security and intelligence networks of countries seeking to gain nuclear capability. However, this does not explain all the factors pertaining to the smuggling of nuclear materials from Moscow to the outside world.

Regardless of what the arcane reasons are for the smuggling, this fearful reality persists that the Western world—on the pretext of some Third World country gaining access to nuclear materials by means of smuggling—may resort to greater pressure on some countries that in the eyes of the West are suspected of activities that the United States and Europe do not approve of, and thus lure the Third World countries toward themselves.

One imagines that smuggling nuclear materials is not as simple as smuggling narcotics and requires precise and complicated planning which is only possible by experienced intelligence organizations. However, there is no doubt that this has given the United States and Europe the necessary pretext to accuse the Third World countries of involvement and to step up their pressure against such countries. The monopoly for nuclear power is definitely in the hands of the greater countries and it is for their joint aim and aspiration that they cooperate extensively in this regard.

It would be quite natural for the Third World to consider this detrimental to itself and it may seek to break this monopoly, but this would certainly not be a very suitable way of doing so.

IRAQ

CW Reportedly Concealed in Mojahedin-e Khalq Depots

MM3009151594 London AL-SHARQ AL-AWSAT
in Arabic 29 Sep 94 p 5

[Unattributed report: "Iraqi Opposition: Saddam Hides Chemical Weapons in Mojahedin-e Khalq Stores"]

[FBIS Translated Text] London, AL-SHARQ AL-AWSAT—Citing "well informed sources," an Iraqi opposition organization says that the Iraqi Government has hidden chemical weapons and materials used in their manufacture in stores belonging to the Mojahedin-e Khalq, the Iranian opposition organization based in Iraq. This came in a statement issued by the support office of the Supreme Assembly of the Islamic Revolution in Iraq [SAIRI]. The statement, of which AL-SHARQ AL-AWSAT received a copy, says that Iraqi President Saddam Husayn took that step because the Mojahedin-e Khalq camps and centers were not subject to international inspection and search for mass destruction weapons.

Quoting the same sources, the statement confirms that a secret agreement was concluded between Saddam Husayn and Mas'ud Rajavi, the leader of that organization, in which the latter undertakes to guard these weapons and lethal materials and camouflage their locations with markings indicating they belong to his forces.

The statement also says that the Iraqi regime previously resorted to two methods of hiding its lethal weapons: One by mounting them on trucks that would keep moving on the various roads and areas, and the other by storing them in remote desert areas, on river banks, or in inaccessible mountain areas. The SAIRI statement adds that the Iraqi regime is trying hard to import raw materials necessary for the manufacture of chemical weapons via Jordan.

PAKISTAN

Need for Regional Approach to MTCR Stressed

BK0309102294 Peshawar THE FRONTIER POST
in English 3 Sep 94 p 8

[Editorial: "MTCR—Need for a Regional Approach"]

[FBIS Transcribed Text] A four-member MTCR (Missile Technology Control Regime) team is here and concluded Thursday its two-day talks with the Pakistan side led by Additional Foreign Secretary Munir Akram. While the former sought to convince Islamabad of the necessity of heeding the regime agenda which requires restricting its missile programme, the latter emphasised the dangers posed by the Indian deployment of Prithvi and testing of Agni missiles. Apparently the MTCR team had communicated its concern to India in this context. To be precise, MTCR teams are visiting some other countries too, including India, Argentina, Brazil and Israel for giving them a pep talk on the urgency of missile non-proliferation. With due respect to the MTCR team(s), it is perhaps a foregone conclusion how the issue will be treated by their host countries. Aside from technical complexities which make a linear process on missile non-proliferation undesirable, it is apparent that MTCR is hardly a mandatory regime with no specially tasked HQ to administer it, as is the case with LAEA (International Atomic Energy Agency). Given the bottomline of MTCR

agenda about restricting the transfer of missile systems and technology to countries with nuclear and chemical weapons programmes, it is clear that it should have brought the maximum pressure to bear on India and Israel. India has responded to MTCR as being a discriminatory accord on the same grounds on which it persists in the rejection of NPT [Non Proliferation Treaty]. Israel for its part would perhaps raise an eyebrow on the mention of MTCR because both its Jericho and Arrow (an anti-missile missile) programmes were financed by America, the latter as part of the watered-down version of American SDI (Strategic Defence Initiative). The only job well done by MTCR has been in relation to slowing down the Brazilian programme and nearly ending that of Argentina. In regard to the Indian IRBM [Intermediate-Range Ballistic Missile] Agni, while the MTCR might have raised the costs, it has not achieved any of the specified purposes on its agenda. Now they are knocking at this country's doors which does not have anything remotely comparable by way of a missile programme.

To be precise, Pakistan has always adopted a regional approach on both NPT and MTCR, as opposed to the global approach India trots out to justify its pursuit of nuclear and missile technologies. However, despite this obvious fact, Pakistan has been singled out on the nuclear count and Washington drummed up a lot of MTCR on the issue of the alleged sale of Chinese missiles to this country. It is a matter of record that the missile race has been introduced in the region by India. With its quantum leaps on the missile front—successful test-firing of both Agni and Prithvi, and the deployment of the latter on the borders—what choice is Islamabad left with but to somehow counter the threat? Add to this the fact that India already possesses an air strike capability far superior to that of Pakistan (which should have otherwise precluded it from pursuing a multiple missile programme) and the situation becomes even more bleak for Pakistan. Evidently, then, the MTCR team cannot achieve its desired objectives in the region by simply voicing its concern about India's ambitious missile development programme. What is needed is greater pressure on India for some actual progress on the ground. Pakistan can obviously not be expected to follow the course prescribed by the MTCR in isolation.

Foreign Minister Denies Chinese M-11 Missiles Delivered

*BK1009100394 Islamabad THE NEWS in English
10 Sep 94 p 12*

[FBIS Transcribed Text] Islamabad—Pakistan's Foreign Minister, Sardar Aseff Ahmed Ali has categorically denied reports that Pakistan has violated any provisions of the Missile Technology Control Regime (MTCR) and received delivery of Chinese M-11 missiles. He urged the United States to pressure India, and not Pakistan, whose missile programme is a serious threat to the peace and security in the region.

Responding to this correspondent's question about his comments on some published reports in the U.S. that

Pakistan has received delivery of Chinese M-11 missiles, which is violation of MTCR, the Pakistan Foreign Minister forcefully denied such reports and said "we don't have those Chinese M-11 missiles. Again and again we have said so to them. We don't have Chinese M-11 missiles. But they insist on saying that we have. Now what do we do about it?" The U.S. State Department officials, in their comments about these reports have also confirmed that they do not have any compelling evidence that Pakistan has received delivery of M-11 Missiles. The Foreign Minister said "but they (U.S.) are not doing anything about the Indian development of the Prithvi and Agni missiles. India has not only developed but also deployed these missiles. So the threat is to Pakistan. Instead of taking some cognizance of this security threat to Pakistan, they (U.S.) want to put the pressure on us as well. Time and again, we have reiterated that we don't have them (M-11)."

Urging America to exert the pressure on the Indian missile programme, Sardar Aseff Ahmed Ali said that "we wish that this pressure would be exerted and asserted where the threat comes from. Why they choose to ignore the Indian deployment and development of missiles and choose to target us for something that we have not done."

When asked that in the absence of Chinese M-11 missiles, how Pakistan will meet the security challenges posed by the indigenous Indian missiles, the Foreign Minister replied that "as I said there is a security threat to Pakistan and Pakistan will take all the necessary steps to meet this growing threat." About the current status of Pakistan's preparedness to meet any security threat from Indian missiles, Sardar Aseff Ali told *The News* that "we are able to defend our country on every front."

Later, a spokesman of Pakistan's Foreign Ministry, Munir Akram, also addressed the issue of MTCR and labeled such reports as fabricated. He told this correspondent that "Pakistan has repeatedly stated that it has not violated the MTCR guidelines." Acquiring of missiles with a range of 300 kilometers with the capacity of 500 kilograms of payload is in violation of MTCR guidelines.

The Foreign Office spokesman confirmed that Pakistan did acquire some short range missiles during the Afghan war, but stressed that the range and payload capacity of these missiles were within the limits of MTCR. He told this correspondent that a "few years ago, after the attacks of Scud missiles from Afghanistan on Pakistani cities, we had requested China for the supply of some short range missiles, which were supplied, quite some times ago. These imports do not violate the MTCR guidelines."

He regarded such allegations against Pakistan as baseless propaganda by those who want to divert world's attention from Indian atrocities and violation of human rights in Kashmir and the missile programme. Munir Akram

said that "India is always trying to deflect pressures from not only Kashmir, but also from its own missile program. That is the real threat to the South Asian non-proliferation regime."

He repeated Pakistan's proposal of making South Asia "a missile free zone." If India is so worried about Pakistani missiles, it should accept Pakistan's proposal of making South Asia "a missile free zone."

RUSSIA

U.S. Nonproliferation Enforcement Said Lax

94WP0147A Moscow *SEGODNYA* in Russian
25 Aug 94 p 7

[Article by Aleksandr Kudakayev: "Russian and German Special Services Signed an Agreement: However, the Problem of Nonproliferation of Weapons of Mass Destruction Did Not Become Any Easier"]

[FBIS Translated Text] The scandal around the allegedly Russian origin of the plutonium intercepted in Munich is proceeding on its natural course. According to information from competent sources, Russian specialists proved convincingly the non-Russian origin of the subject of the scandal.

Yesterday official representatives of the Russian Federal Counterintelligence Service ((FCS)) made public the contents of a memorandum signed in keeping with the agreement reached between the president of Russia and the federal chancellor of the FRG by their authorized representatives: FCS Director S. Stepashin and FRG State Minister Schmidtbauer (who oversees special services). This document is quite general and friendly in tone.

In it, both sides acknowledge the acute need to disrupt by any means available the illegal sales of nuclear and radioactive materials regardless of their origin anywhere in the world and on the territory of their states. They believe that efforts should be made to keep even minute amounts of radioactive materials out of the hands of terrorists, who may use it for blackmail.

The sides expressed a desire to act, within the framework of their respective national laws, in such a way as to take steps toward the fastest possible signing of an agreement on close cooperation in combating international organized crime, terrorism, and illegal international trade in nuclear and radioactive materials, and its ratification and effective implementation. The heads of special services decided to set up in Bonn and Moscow representations for coordination of activities and continue the functioning of existing representations. At the same time, the sides will do everything necessary to increase the effectiveness of their activities and ensure prompt exchange of information between special services aimed at identifying illegal distribution markets for nuclear and radioactive materials with the goal of determining their origin, ways and means of transportation, as well as end buyers. The special services promised to immediately analyze the confiscated material with respect to radioactive isotope content, and immediately inform the other side of the results. The analysis is done in a laboratory of the country on whose territory the material is found.

The colleagues decided that the aforementioned representations, whose competence includes combating illegal trade in nuclear and radioactive materials, will exchange information on the origin of such illegally obtained

material and the participants in such deals, as well as proposals on coordination of investigative actions. The special services decided to undertake building an international system of reciprocal information on such incidents, and when necessary, immediately conduct consultations on the question of operational actions and investigation of said incidents, as well as make an effort to effectively prevent illegal transportation of nuclear and radioactive materials by strengthening border control at state borders.

The problem of nonproliferation of weapons of mass destruction and "dual-use" technologies is much broader, however. For instance, the French authorities have never found the 1.5 kg of plutonium that disappeared some time ago. Actually, this quantity is negligible compared to the United States' loss of 1,000 kg of weapons-grade plutonium. Let us remind the reader of the scandal that broke out several years ago in connection with the acquisition of high-speed electronic switches used in nuclear weapons systems. In violation of the embargo, West German firms supplied to Iran centrifuges which are used among other things for high-concentration plutonium enrichment.

The U.S. Congress General Accounting Office (GAO) in 1994 audited export licenses issued in 1985-1992 by the U.S. Department of Commerce for deliveries of "dual-use" materials, samples, and equipment. There were quite a few interesting things in the report published on the audit results.

The total number of licenses analyzed was 336,000 for an aggregate amount of \$264 billion. Of this, 16 percent (55,000) for a total amount of \$29 billion were issued for exports to 36 countries that are included by the American government on a special list of countries representing a potential threat to the nuclear nonproliferation policy. Eighty percent of the goods delivered consisted of computers, measuring devices, lasers, and metal-working machine tools with numeric program control.

Over 1988-1992, 20,048 licenses were issued for deliveries of "dual-use" goods to eight countries that are causing the United States the greatest concern: Argentina, Brazil, India, Iran, Iraq, Israel, Pakistan, and South Africa. Of this number, 6 percent (1,508) were issued for deliveries to organizations with respect to which the U.S. Department of Commerce had information of involvement in work in the area of nuclear weapons and the production of special nuclear materials.

As the GAO discovered, the Department of Commerce, in violation of established procedures set in the document entitled Export Administration Regulations, adopted in keeping with the provisions of the Nuclear Nonproliferation Treaty, did not always notify the U.S. Department of Energy of requests for export licenses for "dual-use" products. In particular, the Department of Commerce, without notifying the Department of Energy, issued licenses for export of computers. A large number

of licenses were issued unilaterally for end buyers who participate in programs of nuclear weapons development.

The GAO also noted the shortcomings in the activities of the U.S. Department of Energy, which did not notify a special interagency Subgroup on Nuclear Export Coordination of its decisions to permit export of "dual-use" goods. Such violations were noted with respect to 74 percent of licenses sent by the Department of Commerce for further approval to the Department of Economics [as published]. Among them were some that permitted deliveries of special equipment to organizations engaged in nuclear weapons development.

The same office's staff also established that the Department of Commerce in most cases picked out for the so-called "sample" preliminary inspections of end buyers of products those organizations that had already passed such a check. That is, they checked those organizations where no criminal activities were known to exist. The most amazing part is that in 39 percent of cases repeat checks were conducted with respect to organizations already known to participate in the development of nuclear weapons, and despite this, the ministry issued export licenses to them.

It also came out that the people tasked with inspections were members of U.S. embassies who did not have the necessary technical knowledge. In its requests to U.S. embassies, the Department of Commerce frequently did not provide key information (the reasons for inspection, terms for issuing an export license). In many instances inspections were conducted by locally hired embassy personnel.

In a number of instances, the export of "dual-use" goods was carried out to countries with which the United States had bilateral agreements whereby the respective governments guaranteed that the goods delivered would be used solely for civilian purposes. However, as the GAO established, the State Department does not have a mechanism to monitor compliance with such agreements.

If we forget for a moment that the subject of the report is the United States, the situation is highly recognizable: With enough money you can buy a nuclear bomb and do so without interference on the part of state units.

North Korea's Nuclear Capability Considered

94WP0146A Moscow *SEGODNYA* in Russian
26 Aug 94 p 4

[Article by Major General (ret'd) Vladimir Belous: "How Much Plutonium Did Kim Il-song Have in His Pocket?"]

[FBIS Translated Text] The crisis that has erupted on the Korean peninsula as of late, at times subsiding, at times intensifying, is the focus of attention by no means by accident: For the first time in the 25-year history of the Nuclear Nonproliferation Treaty a party to it has demonstratively attempted to withdraw from it, openly

challenging the world community. But attention has been focused on the subject of Korea for another reason also. The point being that secret documents on the 1950-1953 Korean War that had been kept in archives were recently made public.

They leave no doubt that the first shot in this war was fired by North Korea, whose leadership was gambling on the unification of North and South by military force. But the entry into the war of the United States fundamentally changed the course of combat operations. A report of the Department of the Air Force of the United States was published after the war. It pointed out that the Pentagon had planned to strike in the evening of 25 November 1950 with nuclear weapons, dropping seven bombs on North Korea. But President Truman could not bring himself to give the order for the use of nuclear weapons for the second time in his life.

Kim Il-song proved to be a diligent student and learned this lesson concerning the role of nuclear weapons well. Some time would elapse, and North Korea would embark on the fulfillment of a wide-ranging program of the creation of powerful armed forces equipped with nuclear weapons.

The Army—Main Purpose of the State

Following the defeat in the war, Pyongyang made considerable efforts to enhance the combat possibilities of the army. The DPRK was rendered appreciable assistance by the Soviet Union and China here.

Emphasis was put from the very outset on a buildup of offensive possibilities. The quantity of tanks, landing ships, submarines, and military-transport aviation was increased. At the start of the 1990's the army of the DPRK had two armored, five mechanized, and 25 infantry divisions, seven separate armored brigades, nine infantry brigades, and 22 (!) special forces brigades. The overall strength of the armed forces amounts to 1.127 million men (fourth in the world after the United States, China, and Russia), which constitutes more than 5 percent of the country's total population.

According to defectors, many secret military bases located under ground or dug into the hills have been built in the country. Entire cities with harbors, storehouses, and other facilities of the naval infrastructure have been created on the islands of Dayva, Dzhunvey, and Ryuko.

Nuclear Syndrome

Following the example of its "elder brother"—China, where Mao very successfully resolved the nuclear problem and carried out the first test of an atomic bomb in 1964—the North Korean regime began its secret ascent to the cherished goal—possession of nuclear weapons.

An agreement was signed between the DPRK and the USSR in 1956 even on cooperation in the sphere of the peaceful use of nuclear energy. Dozens of specialists of

North Korea underwent training in the USSR and worked as trainees in China. The research center in Yongbyon, where, together with work in the sphere of nuclear power engineering, research with military applications came to be conducted, was created in 1964 with the help of the USSR and China. A five-megawatt research reactor supplied by the Soviet Union was commissioned there in 1965. The construction of a 50-megawatt nuclear reactor, which was to have been completed in 1995, was launched in Yongbyon at the start of the 1980's.

Specialists note that both reactors could be used both for the generation of electric power and for obtaining weapons-grade plutonium. The construction of a gas-graphite (also dual-purpose) reactor in Tkhonchkhon is being completed.

At the present time, when the design of the simplest nuclear weapons is no longer a secret, obtaining the necessary quantity of fissionable material is a critical element of military nuclear programs. The main criterion in an evaluation of the degree of advancement of the North Korean military nuclear program, therefore, are answers to the questions as to the quantity of plutonium that has been produced by this time and the prospects of its production in the coming years.

For approximate calculations of the quantity of plutonium produced in reactors, specialists employ quite a simple formula: A reactor produces one gram of plutonium per megawatt of capacity in 24 hours. In other words, the five-megawatt reactor in Yongbyon could produce five grams of plutonium a day or approximately 1.8 kg a year. With the commissioning of the 50-megawatt reactor these possibilities will constitute approximately 20 kg a year, which would be sufficient for the manufacture of four warheads.

But, despite this seeming simplicity of calculation, the intelligence services of the world's leading countries differ considerably in their estimates of the quantity of plutonium at Pyongyang's disposal. It follows from a statement of J. Woolsey, director of the U.S. CIA, that the DPRK had in 1993 even a sufficient quantity of plutonium for the manufacture of a nuclear weapon. In his opinion, in 1995 Pyongyang will be capable of manufacturing five or six warheads. A memorandum of KGB Chairman V. Kryuchkov to the leadership of the USSR dated 22 February 1990 reported that the development of the first atomic explosive device had been completed at the nuclear research center in Yongbyon. It was pointed out here that Pyongyang was declining to conduct tests as yet for this could immediately reveal the state of the work on nuclear weapons.

The Foreign Intelligence Service of Russia makes a far more modest estimate of the progress of the DPRK's military nuclear program. A report that it prepared in the fall of 1993 states: "The DPRK does not possess nuclear weapons at the present time. ...The widespread estimates concerning a 'breakthrough' in the DPRK's manufacture of its own nuclear weapons are seriously doubted."

Matters Concerning the Possible Design of a Bomb

A country that has resolved to manufacture nuclear weapons in secret is faced with many scientific and technological problems. They include the problem of choice of weapons-grade fissionable material, which, in turn, determines the particular features of the design of the nuclear warhead and also the composition of the entire nuclear infrastructure. The creation of warheads based on highly enriched uranium requires the construction of huge enrichment enterprises, concealing which is practically impossible.

The production of plutonium, on the other hand, is easily concealed behind the mask of civil industrial power engineering. In addition, as the research of American specialists has shown, not pure weapons-grade plutonium but that separated during the reprocessing of the spent fuel of industrial nuclear power stations may be used as fissionable weapons-grade material.

At the same time, on the other hand, the manufacture of a nuclear weapon based on plutonium represents a more complex design task than with the use of uranium.

By virtue of the complexity of such a device, the demands on the synchronization of the operations of the entire automatics of the warhead to an accuracy calculated in micro-seconds are extraordinarily high. The DPRK's designers have quite a complex mission, therefore. Even having created and stockpiled several warheads, specialists will be forced to conduct the tests necessary for checking their reliability and determining their operational specifications. This would be an open demonstration of a military nuclear program for, with the present state of the monitoring system, concealing even underground tests is impossible.

The Missile Sufferings of the DPRK

The leadership of North Korea has long striven for missile weapons. Tactical missiles fitted with conventionally armed warheads—Frog 5 and Frog 7 with a range of 50 and 70 km respectively—were purchased in the Soviet Union back in the 1960's. Subsequently the Soviet SCUD missiles with a flight range of up to 300 km were made part of the arsenal. And flight tests of a North Korean-built SCUD began in 1984. In 1985 the DPRK began the series manufacture of a new model. Iran participated actively in the funding of the work.

The flight range of the upgraded missile was increased to 340 km, and the payload was increased 15 percent.

During the Iran-Iraq war specialists of the DPRK familiarized themselves with fragments of Iraq's al-Husayn missile, which also was a development of the Soviet SCUD. The additional information came in quite useful, and the production of experimental prototypes of the new SCUD-C model began in 1989, and its flight tests began the following year. The range of the new missile had risen to 600 km with a weight of the warhead of 700 kg.

The testing in May 1993 of the Nodong-1 new North Korean missile came as a big surprise to foreign specialists. This caused great alarm in the world community, particularly in connection with the fact that the DPRK had in March announced that it was withdrawing from the Nuclear Nonproliferation Treaty. There had been a demonstrative merger of two most important military programs—nuclear and missile. Iran and Libya are taking part in the funding of the Nodong program. The range of the new missile reaches 1,000 km. This means that it covers not only the whole territory of South Korea but the western areas of Japan also.

What Goals Has Pyongyang Been Pursuing?

In an examination of the DPRK's nuclear missile programs there arises the legitimate question: What has driven Pyongyang, forcing it to become mixed up in so risky an undertaking?

Pyongyang's first goal was to acquire the status of nuclear power, enhancing its international rating. This explains the DPRK's attempt to withdraw from the Nonproliferation Treaty and to evade IAEA supervision with a view to confronting the world with a fait accompli. Pyongyang recognized that IAEA experts' discovery of nuclear preparations could lead to the DPRK sharing the fate of Iraq before it had taken possession of the new weapons.

It cannot be ruled out that, having established the production of weapons-grade plutonium and, perhaps, nuclear weapons even, Pyongyang could organize their clandestine sale to its traditional missile customers and other totalitarian regimes that are striving insistently after the nuclear bomb.

Another and, perhaps, most likely purpose of Pyongyang's nuclear ambitions was the intention to swap its nuclear program at as high a price as possible for significant political and economic concessions on the part of the United States, Japan, and South Korea. The leadership of the DPRK has proceeded here from the fact that the further the work on nuclear weapons progresses, the greater the fee that these countries will be forced to pay for the DPRK's renunciation of them. The possible demands on the part of the DPRK could include a reduction and even the elimination of the American military presence on the peninsula, an end to political and economic discrimination, and economic assistance for the republic.

Company Hoping To Recycle Chemical Weapon Poisons

MM0109095794 Moscow KRASNAYA ZVEZDA
in Russian 27 Aug 94 p 3

[FBIS Translated Excerpt] [passage omitted]

Yegorov: Boris Mikhaylovich, talking about the most important areas of the corporation's activity, what should we dwell on first?

Belousov: First, I would say that we are continuing to cooperate with the Defense Ministry in shaping long-term and annual sectoral research and development plans. The corporation is cooperating equally closely with the Russian Federation State Committee for the Defense Sectors of Industry. We have also concluded an agreement with them on the joint implementation of conversion programs, programs for recycling munitions, etc.

Second, under the treaty on scientific and technical cooperation with the Russian presidential Committee for Convention Problems of Chemical and Biological Weapons we are continuing for the third year now to implement the program for eliminating chemical agents stored on Russian territory.

Information

Yegorov: Russia has stockpiled around 40,000 tonnes of chemical agents. They are to be destroyed under the international accords. Six months ago the cost of the destruction program stood at around 2.5 trillion rubles or \$500 million.

Belousov: Foreign partners have been enlisted in this work, and it is planned to expand this cooperation with the help of an international consortium which includes German companies. Last year and this year the German federal budget allocated 5 million marks apiece for the development and manufacture of a so-called pilot, i.e. experimental, installation to destroy chemical toxins. There is every reason to think that next year the German side's share will increase considerably.

Yegorov: Your corporation took part in organizing a tender for technologies to destroy chemical agents. What were the results?

Belousov: Despite a host of foreign projects that envisaged direct combustion, we chose Russian technology that will make it possible not just to destroy but actually to recycle some elements. Let us start with lewisite. We want to supply the electronics industry with a product obtained from recycling it—pure arsenic—for the production of semiconductors. Given that the purification of natural arsenic is a very costly business, we are counting on interest from the electronics sector.

Yegorov: How is it proposed to destroy the toxins? Will special centers be created like those that have already been set up to recycle conventional munitions?

Belousov: They will probably be destroyed directly in the regions where they are being stored. There is lewisite in the city of Kambarka on the Kama, so that is where it should be destroyed. There are no plans to transport the toxins because the public demands maximum security. There is no need to repeat the situation that developed at one time around the Chapayevsk plant which was engaged in the destruction of chemical munitions.

The third-most-important area of our activity can be said to be providing the corporation's enterprises with material and technical resources and spare parts. [passage omitted]

Former Government Official on Lax Storage of Nuclear Material

OW3008095594 Tokyo ASAHI SHIMBUN in Japanese
28 Aug 94 Morning Edition p 3

[FBIS Translated Text] Moscow, 27 Aug—Former Chief Inspector Kuznetsov of the Russian State Committee for Atomic Power Surveillance [SCAPS], who headed the committee's Inspection Bureau until the end of 1992, recently gave an interview to ASAHI SHIMBUN.

In the interview, Kuznetsov said the Russian Atomic Power Ministry does not accurately know how radioactive substances are stored and transported in the nation, noting considerable amounts of nuclear fuel are not protected from burglars. In addition, he referred to the accidental explosion of improperly-treated nuclear waste.

In the SCAPS, Kuznetsov was in charge of supervising about 70 nuclear facilities and power plants near Moscow. Based on the experience, he noted that in Russia and other former Soviet republics, several medical facilities and closed nuclear cities, such as Arzamas 16, are not adequately protected from burglars.

As examples, Kuznetsov introduced the following theft cases:

- 1) From 1991 to 1992, 1.5 kilograms of fissionable uranium 235 was stolen from a nuclear facility in Moscow Oblast. The offender kept the uranium on a porch.
- 2) In October 1992, 180 kilograms of cesium 137 was stolen from a physical energy research institute in Obninsk.
- 3) During the "Moscow turmoil" in October 1993, 13 units of a fire prevention device containing plutonium disappeared from the Moscow Municipal Office.
- 4) In October 1993, fuel rods were stolen from the Chernobyl nuclear power plant.

Kuznetsov stated: "Russia does not yet have clear national policies for the safekeeping of radioactive substances. Moreover, Russia does not have a complete list of radioactive substances in the nation. Nuclear engineers are suffering from reduced wages, and they often do not receive wages as scheduled. These factors all benefit organized criminals."

Kuznetsov then referred to the danger of improperly-treated nuclear waste, noting liquid nuclear waste exploded three times at an underground storage facility in Ulyanovsk Oblast, and these explosions caused minor tremors. In conclusion, he noted Russia is not ready for managing increasingly radioactive substances while the Ukraine is going to send strategic nuclear warheads to Russia for disassembly.

Since resigning from the SCAPS, Kuznetsov has been promoting campaigns to strengthen control over radioactive substances in Russia, stressing the danger of Russia's nuclear storage practices.

Arzamas Scientists See Plutonium Claims As 'Provocation'

MM3008104794 Moscow KRASNAYA ZVEZDA
in Russian 30 Aug 94 p 3

[FBIS Translated Text] Arzamas-16—The discordant fuss over the plutonium-239 found in the hand luggage of a passenger arriving at Munich Airport from Russia has reached Arzamas-16. Those working there are using many parameters to assess the case. And, apart from their professional concern, they are not concealing their equally professional indignation about the reluctance shown by politicians and news agencies to listen to their informed opinion.

I spoke with V. Beluzhnyy, director of the Russian Nuclear Center, Chief Designer S. Voronin, Chief Engineer Yu. Tumanov, Professor S. Novikov, leading specialists A. Voynov and V. Selemir, and Doctor Steven Younger, an American scientist from the U.S. Los Alamos National Laboratory. They all claim, and most cogently, that the fuss is nothing but a provocation concocted by politicians and seized upon by the press—an act of propaganda with malevolent overtones. Since even the first and noisiest cry of "Guards!" has not been backed up by any kind of serious evidence. Incidentally, even the German scientists themselves feel somewhat awkward owing to the unconvincing and dubious nature of their stories.

The facts are these—the plutonium in question is not used and is not produced in Russian nuclear weapons. This is confirmed by data from a special analysis. It is the same as, say, steel or copper—a study of the sample can accurately determine the plant where it was produced. Moreover, no weapons-grade plutonium-239 has gone missing in Russia, and the quantities present at its "areas of usage" are confirmed by documents. As for the question of the specific ownership of the ill-fated nuclear material, it has to be answered by Bernd Schmidbauer, minister of state at the FRG Federal Chancellery. If he requires skilled assistance, scientists from Arzamas-16 are ready to provide it. But there has as yet been no official statement from the minister.

Fuel was added to the flames by the 22 August incident at Arzamas-16. What happened was this. Two "persons unknown" (their names are not being given for the time being in the interests of the investigation) were detained and arrested at a checkpoint. Their car contained uranium-238, criminal proceedings have been instituted, and an investigation is under way. Western news organs are trying to use this fact to support the theories about the plutonium-239 that have already been refuted. It is being claimed that the eight or nine kilograms of "fresh weapons-grade material was intended for a mysterious and secretive figure."

Some clarification, it seems, is required. First, the uranium-238 was not weapons-grade material at all. It is used for technical purposes and typically emits low-level

radiation. Second, the material discovered on the "persons unknown" at the checkpoint is technological waste from experiments carried out in 1988. It is not subject to special storage, although it is accounted for. Third, any removal of uranium-238 is prevented by technical controls [kontrol]. I repeat—controls!

Now to turn to the main point. Why is so much left unsaid in the various statements and hints about the "plutonium-uranium affair"? Who needed this? For what purpose? I will tell you. To get the public worked up, to scare the gullible, to cast aspersions on Russian nuclear production and scientific centers, to make people doubt that we observe safety norms and are not involved in the illegal trafficking of nuclear material, and so forth. And then to impose on public opinion the idea of the need for stringent international monitoring of "the Russians' secret nuclear installations," of the need to send "blue helmets" to Arzamas-16, Chelyabinsk-70, and similar closed cities. Just in case....

Beautiful, isn't it? Except that it is all designed for simpletons. It will not work! You cannot run big-time politics on the basis of provocations. It would be better for us to make joint efforts to find out where the plutonium-239 came from. And put a stop to such things.

Nuclear Contraband Export From CIS Viewed

94WP0156A Kiev DEMOKRATYCHNA UKRAYINA
in Ukrainian 6 Sep 94 p 3

[Article by Volodymyr Slavchuk (UNIAN): "Is There a 'Nuclear' Mafia?"]

[FBIS Translated Text] The number of incidents involving international "nuclear" contraband is rising almost monthly: five such cases have been recorded just since May. Radioactive materials are being found in garages and airplanes; they are being seized at customs checkpoints and confiscated during transfers from buyer to seller. One of those arrested stated that there are currently at least 150 kilograms of "weapons-grade" radioactive materials in illegal circulation in Europe. Until recently, it was believed that eight to ten kilograms were needed to make one bomb; just a few days ago, physicists from a West European nongovernmental organization stated that the official danger "threshold" for the amount of material that needs to be processed to produce one nuclear weapon should be lowered to one kilogram. Scientific advances now make this possible.

Is there a potential for the emergence of a large illegal market? Here are a few more numbers: the CIS countries have a supply of between 150 and 170 metric tons of plutonium for manufacturing bombs and more than one thousand metric tons of highly enriched uranium, which can also be "put to work." At the end of July 1991, the former USSR had 30,000 units of tactical nuclear weapons, and a minimum of 1,400 warheads on strategic delivery systems were found outside the borders of Russia, in particular in Ukraine.

Because most recorded instances of contraband carry a Moscow "passport" (German experts believe that the radioactive materials came from Russia), the attention and criticism of the West has been focused primarily on Russia as a country that has a ramified system of nuclear weapons, as well as on those CIS countries that are shipping "their" warheads to be dismantled in Russia under international agreements. In recent days, the Western side has made a representation on this matter to the Ministry of Foreign Affairs of Ukraine, but, as usual, the ministry's response has not been made public.

But then, so far, we are dealing only with conjectures. The actual culprits and the addresses of the contraband have not been found (except for a few "pawns" acting as couriers). The case remains open. Moreover, only a few days ago, the Russian side announced that "this is a provocation." It was only after more smugglers were arrested—in Kaliningrad—that Russia was forced to change her attitude to the problem.

The West's position with respect to the CIS in general, and Russia in particular, is as follows: there are on the territory of the former USSR dozens of plants that produce plutonium, institutes, laboratories, and warehouses with stockpiles of materials suitable for the production of nuclear weapons. Whereas before the collapse of the Union, the situation was stringently controlled, especially by the KGB, with the disintegration of the Land of Soviets, this situation has changed substantially: order has grown lax (more precisely, disorder has grown), scientists and technical specialists who work with nuclear materials have become impoverished, and the amount of these materials is steadily growing as a result of the dismantling of warheads. All these factors have caused this dangerous "production" to appear on the market.

So far, informed sources in the West report only the existence of a "supply market"—who the buyers are has not been discovered. But who can guarantee that such buyers will not appear tomorrow: terrorist groups or even certain states in the Middle East and Asia?

Moreover, according to some sources (the German intelligence service, BND, does not refute them), there is no need to bring these materials to the Federal Republic of Germany; they are there already. Before being withdrawn to Russia, the ranks [chyny] of the Western Group of Forces of the Ministry of Defense of the Russian Federation sold anything and everything on the black market. In addition, as the German newspaper *Stuttgarter Nachrichten* [transliterated spelling] notes, the former members of the East German state security service and of the East German military are quite capable of supplying radioactive materials from the former USSR. They have excellent contacts in Russia, Ukraine, and the other CIS republics. As far as Russia herself is concerned, it turns out that the fine in Russia for violating the regulations governing the handling of radioactive materials is one hundred (!) rubles...

The situation that has developed is a serious blow to Russia's position. When insisting that the nuclear warheads from other CIS states be shipped to her territory, Russia justified this demand by claiming that the radioactive materials could be stored under proper supervision only in institutions under Moscow's control. Today, when the West is voicing serious criticism of Russia, it appears that it is time to admit that there exists a deep gap between the "accomplishments" in this respect announced by Moscow and the sad reality.

Here is eloquent fact: in an attempt to remove the blame from Moscow, Russian propaganda in recent days has tried in every possible way to besmirch the "uniforms" of the other CIS republics, including Ukraine's. The Ostankino channel in particular has been "informing" television viewers in this vein.

Most interesting (and most dangerous to us) is that inasmuch as no one knows so far where the radioactive materials were stolen from and who stole them and transported them to the West, Ukraine (and Kazakhstan) can do no more than declare that she is not involved in this affair.

Officials and organizations state that "this process can be stopped" if there is international cooperation in guarding nuclear materials and combatting their illegal sale. We would like to see the future confirm this very point of view.

Physicist on Soviet Nuclear Espionage

94WP0149A Moscow LITERATURNAYA GAZETA
in Russian No 36, 7 Sep 94 p 10

[Interview with Professor Arkadiy Brish, doctor of technical sciences, by LITERATURNAYA GAZETA commentator Oleg Moroz; place and date not given: "We Copied the Charge Design, Not the Bomb Itself, Maintains Professor Arkadiy Brish, Doctor of Technical Sciences, One of the Developers of Soviet Nuclear Weapons"]

[FBIS Translated Text]

Moroz: You began working in KB-11 [Design Bureau]—later renamed Arzamas-16—in the summer of 1947. Was it known at the time that our leading physicists had put together wish lists for intelligence and received relevant data from it?

Brish: I was in somewhat close contact with Tsukkerman, Dukhov, Shchelkin, and Khariton. At the time there was never any mention of receiving intelligence information. Even more importantly, there was no mention of it even later, over the subsequent decades. Only five years ago did I bring up this topic with Yuliy Borisovich Khariton. "Did we really receive something from intelligence or borrow something?" I asked him. "We did not know anything about it." He said that actually there had been certain information... I became very interested in this then and obtained permission to look through the materials kept by Kurchatov in two

safes in the Urals. They were later transferred to the ministry. I looked through a total of 15-20 files. My impression was that only 5 to 10 percent of this material was related to weapons. Mainly they dealt with questions of isotope separation, enrichment, plutonium production, and all sorts of reactor-related matters... As to weapons-related questions—there were different designs of the atomic charge there. I did not see any blueprints.

Moroz: Nevertheless, blueprints and calculations were obtained by intelligence. This is a widely acknowledged fact. Apparently it simply is kept in a different place.

Brish: I do not believe it. A whole boxcar would be needed to carry a full set of blueprints for the bomb... Again, people confuse the design of an atomic bomb and that of an atomic charge. A charge is a charge, and a bomb is a bomb. When designing the latter, completely different problems have to be solved than when designing the charge. These include automatic and safety systems, hitting the target, various aerodynamics issues... In this respect we did not have to borrow anything. Therefore, when he speaks of atomic bomb design, Khariton most likely means atomic charge design. Since different versions of it were under consideration, having relevant intelligence data made it easier to understand which direction to head. However, I repeat that until lately there was no talk about it in our community—in the community of leading scientists who participated in the creation of the atomic bomb. Quite the opposite, numerous inventions were made, discoveries, pioneer work.

Moroz: Whichever—now it is official that the first Soviet atomic bomb detonated in 1949 was a copy of the American bomb...

Brish: It was a copy with respect to the charge design. For this you do not need any blueprints. Everything may be sketched by hand. Here is the central plutonium part... Here are the uranium components... The explosive compound... The lenses... I can clearly imagine the course of Yuliy Borisovich Khariton's thought when he saw this design: The first thing that needs to be done is to form a convergent shock wave. I think that neither Khariton nor Zeldovich got into it until that point. For them it was probably a discovery of sorts. Next, they also saw the means of forming such a wave—the bratol [as transliterated] lens. I asked Yuliy Borisovich: "Apparently this was a surprise for you?" He said: "Yes, Zeldovich and I did not know this."

Moroz: You mean that the meaning of the wording "the bomb was copied" boils down to precisely this: the convergent shock wave, the bratol lens?

Brish: Apparently. And the word "copy" greatly exaggerates the substance of the matter. I regret that Yuliy Borisovich used this word. Khariton is an unambiguously honest person. He attaches great significance to the idea, to who expressed it first... He put one meaning in the word "copy," but it is interpreted quite differently.

You also have to imagine the atmosphere of these years. Different versions were under consideration. Everything was to be approved by Vannikov, Beriya, the council... And any deviation from what the Americans were doing was met with criticism: "Why do you need to split hairs? Why are you trying to make it better? Do everything like they do!" But what does it mean to "do what they do?" Another "flying fortress"? Our designers decided to reproduce it in their own way. But Stalin ordered: No "liberties," do it exactly the same as the American version. Meanwhile, it was not possible to replicate it precisely. Neither the aircraft nor the bomb. I am given the nuclear charge design, for instance... Here is an explosive with a certain index... "Reproduce!" But each country has its own explosives. We could not get the American material. You have to figure out its properties—stability, aging. It has to be ideally uniform. For this you need to develop a special technology for its production. We spent two years, day and night, doing this... Next, the plutonium, uranium, and aluminum in our country were different from that which the Americans used. Our own fastenings. And everything had to be figured out... Therefore, choosing a nuclear charge version is only a beginning.

Moroz: Still, who had access to intelligence data?

Brish: Beriya, Kurchatov, Savenyagin, and Khariton, I think... Apparently Zeldovich... They had the opportunity to compare this data with what we were doing. For the rest of the staff working on the atomic bomb project, all this was under lock and key. I am certain that neither Dukhov nor anybody else knew anything about it. We were all very close, and had someone known something, it would have slipped out eventually, at some joint feast...

Moroz: In your recent remarks at the Russian Academy of Sciences presidium you said that the role of intelligence at the first stage was of a "special nature." What does this mean?

Brish: It was special in the following way. A number of our scientists—Flerov, Kurchatov, Semenov—submitted proposals to the government to start working on an atomic bomb. However, if there had been no intelligence data saying that the West was already conducting such work, neither Stalin nor Beriya would have accepted the need for it. Therefore, at the first stage intelligence data played a tremendous stimulating role. It was during the war, in 1943, that Kurchatov was made the director of a specially created institute. In this, of course, the main role was played by intelligence data—not someone's reputation or anything else—nothing was trusted at the time. In 1945 the Americans detonated three bombs. At this point neither Stalin nor anyone else could question the viability of such project. KB-11 was set up in 1946.

Moroz: You said that you looked through 15-20 files from Kurchatov's safes. How many were there altogether.

Brish: I believe 30 or 40.

Moroz: If we assume that they came from intelligence—is it possible that all these data were obtained by one person—for instance, Klaus Fuchs—or were they obtained by several intelligence officers?

Brish: I believe that more than one person was working on this. I am looking, for instance, at the subject of interest to me—the automatic detonation system. And I see some general discourse, and suddenly there is a piece of information that the condenser weighs 200 kg. On one hand, complete ignorance of the substance of the matter, and on the other—information about the concrete weight of one of the parts. It is unlikely that this information came from Fuchs. Next, there is a lot of information on reactors there. This is also not his field, assuming that he was working on the implosive bomb... A lot of information on separation of isotopes... I do not think that one person could provide all this information.

Moroz: Do you find absurd the contention that Fuchs could have been helped by one of the leading figures working in Los Alamos—Oppenheimer, Fermi, Bor, Scillard?

Brish: All these contentions have no proof.

Moroz: The explanation now given to the fact that our bomb was a copy is that in the event a test failed, it would have been the end not only for the collective working on it, but all Soviet physical science would be wiped out. Did you personally feel such a danger then? Were you afraid that you would be arrested?

Brish: I could easily imagine that we would be arrested in the case of a failure. And not only before the first detonation. I was never certain. True, almost no one had ever been arrested among my colleagues. But if we failed... failed in a major way... Actually, it did happen once. In 1954. A nuclear detonation did not commence during the test. Only the "initiating" detonation of the regular explosives. A commission was working on it. The investigation never got underway. If it did, it is hard to tell what would have happened... The main point is that it is practically impossible to figure out why the detonation failed to materialize, because everything is destroyed in the explosion. You have complete freedom of conjecture.

Moroz: But in those times long investigations were not in fashion. If they wanted to have Khariton's or someone else's head, they would have easily done it without any investigation. Which means they did not want to. They needed Khariton.

Brish: Yes... One could always find substantiation if one wanted to. There was documentation, after all. You can always find something to criticize if you really want to. I recently looked through that commission's documents. There were grounds for penalties. For instance, a certain measuring device was supposed to be brought in. It was not—someone forgot. Sedition. Second, a test set of capsules had not been detonated... For me as a specialist

it is clear that this was not the cause of the failed test, but formally, if there are violations, deviations from instructions, and there is a failure, you have the culprits ready-made for you. You cannot prove anything to anybody.

Moroz: You have been working on nuclear weapons for 47 years, to this day. All these years you have continued getting intelligence data, have you not? You are probably still getting it. Does it help in your work?

Brish: Yes, of course, I have been and am receiving it. And I can tell you with certainty: It is of secondary importance. Here, for instance, you can see the latest report. What is being done in the United States and how... I can tell you honestly: It is almost impossible to comprehend this data fully, in depth. Until you do the work yourself, touch it with your own hands. You can ask me: What did you borrow from this? What did you steal? Nothing, I did not steal anything. I cannot steal anything. They have their own solutions. Based on their own technology. Here, for instance, they put a different wire... Here they did something differently... Positioned it differently... Do not think that creating a difficult construction—which a nuclear bomb is—boils down to a certain idea and scheme. That is only a beginning. It is only in mystery novels that as soon as you manage to photograph the documents, everything becomes clear.

Moroz: Along with real spy information of varying degrees of value, sometimes, as we know, you get simply disinformation. Have you encountered it?

Brish: Yes. Some time around 1960 we got information about the so-called meson bomb—incredibly powerful, thousands of times more powerful than the existing ones. Zeldovich says: "Nonsense!" Khariton did not believe it either. Nevertheless, the bosses decided to set up a special unit, which spent several years doing all sorts of calculations. In the end this line of research was closed. Of course, some costs had been incurred...

Moroz: Which means that the disinformation worked as intended.

Brish: Yes. Much depends in this respect on who gets the information. It is one thing when the recipient is a scientist, and quite another when it is a politician. The latter will try to squeeze everything possible out of it to further his goals—to reinforce his standing, to move up the career ladder. And when it comes out that the whole thing is a soap bubble, the person who got it going is often already far away, doing completely different things, in a completely different area...

Uranium Theft From 'Closed' City Reported

BR1509141794 Rome LA REPUBBLICA in Italian
13 Sep 94 p 17

[Enrico Franceschini report: "Artsamas, Bomb City"]

[FBIS Translated Text] Artsamas 16—The nonexistent city lies beyond a sign which reads, "no through road."

Any passerby would see the road disappearing into the forest and would say: That road must come to an end nearby; it does not go anywhere. But if you follow it, the road suddenly widens to make room for a red-brick roadblock with an automatic gate and a double fence of barbed wire. Beyond that lie the first houses of Artsamas 16—the "cradle" of the Soviet nuclear bomb, the largest center for nuclear weapons research, manufacture, and assembly in the whole of Russia. Actually it is much more than a research center: a city of 80,300 inhabitants, almost as large as Pavia or Viterbo [Italian towns], which has never appeared on any map. This, because it is a secret city, a "closed" city, which nobody can enter or leave freely.

Nevertheless, 9.5 kg of enriched uranium did leave this "closed" city a few weeks ago. It was supposed to be sold to "atom merchants," dealers who try to clandestinely procure the ingredients for building nuclear bombs. The thieves were arrested and the uranium was recovered. It was subsequently discovered that it was of a kind that could not be used for military purposes. But thefts of this kind now occur in Russia at the rate of one every week. And the suspicion that the "closed city" is no longer perfectly sealed is causing the West to tremble.

In the West too, of course, military bases and nuclear research centers are not as open to the public as a shopping mall. But a "closed" city is another matter. In order to form an idea of it, you must imagine a vast fir and beech forest right in the middle of Russia, like this one, 800 km east of Moscow. Now imagine that a clearing of 200 square km has been created in the midst of the forest. A city has been built in there. Around the city a barbed wire fence 800 km long has been erected, with frequent guard posts, observation towers, and alarm systems. Only one road leads to the city, the one beyond the "no through road" sign. The city has everything, just like a real city—factories, offices, stores, schools, gardens, a movie theater, a theater, a hospital, a stadium, and of course a mayor and a city council.

A Million People Do Not Exist

But nobody can prove that it exists. It is not shown on geographical or road maps. It has a telephone area code, but you will not find it in any directory. It has a maternity clinic, but the children born there have Moscow recorded as their birthplace in their passports. It has a soccer team that takes part in a regular championship, but the other competing teams belong to other "closed cities," and you will not find a single newspaper in the whole of Russia that reports the match results.

There are 10 "closed" cities, with a total population of 700,000, plus a further 100 smaller ones, with a further 800,000 people. Who are these 1.5 million men and women living in ghost towns? They are scientists, technicians, workers in the military and civilian nuclear industry, plus their families, plus all those necessary to the functioning of a city—garbage men, for instance,

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store assistants, waiters, teachers. And so forth. Somebody dubbed this complex of top-secret "closed" cities the "Nuclear Archipelago." And Artsamas 16 is the unofficial capital of this archipelago. This, because it was the first "closed" city: It was founded by Beriya, Stalin's executioner, in 1946. It was supposed to be the Soviet answer to America's Los Alamos. And it became so. Now we know that it houses the headquarters of the Experimental Physics Institute, the nation's premier nuclear research institute. It is also the home of "Avanguard," the electrical engineering factory that produces nuclear warheads for strategic missiles. Andrey Sakharov worked here for 16 years.

At first sight, Artsamas 16 seems hermetically sealed, in accordance with its reputation. The guard post at the end of the "no through road" is well defended by uniformed troops. From time to time the gate opens to allow an army truck to enter or leave. More rarely, civilian vehicles carrying people in civilian clothing come and go, after careful inspection of passes. Artsamas 16's deputy mayor, Valentin Mamyshev, explained by telephone: "We have not adopted any additional security measures. We have the usual entry and exit procedures. As far as I know, the theft of the 9 kg of uranium was the first case of this kind to have ever occurred here."

But in post-communist Russia, with the collapse of the dictatorship, came the collapse of any kind of discipline, and even the rigid system for monitoring the "closed" cities seems less strict than before. A few kilometers away from the "no through road" sign there is a village of dachas and tiny plots of land where the inhabitants of Artsamas 16 can cultivate small private allotments where they grow potatoes and cucumbers—essential foods to supplement their winter diet: "At one time," one of the allotment owners said, "we were forced to grow our potatoes inside the city, in the gardens, in any plot of free land. Now they let us come as far as here. That is something new."

Lost Privileges

At Diveyevo, the nearest town to Artsamas 16, Yuriy Bragin, a nuclear physicist confirmed: "We have never been as free to come and go as we have in the past two years." So free that he has stopped working as a physicist and has opened a tiny brewery in Diveyevo. He earns three times as much as before: "Science is finished in Russia," he complained. "This is why I started brewing beer."

The longer you spend on the "no through road," the clearer it becomes where the breach in the wall of the Nuclear Archipelago lies. In the Soviet Union the inhabitants of the "closed" cities, the "atomtchiki," enjoyed privileges: They relinquished freedom of movement (not that there was much of that even for the inhabitants of "open" cities), and in exchange lived in more comfortable houses, food was always abundant in their stores, and their pay was well above average. It was not a luxurious life by Western standards, but compared to the

standards of the USSR, it prompted sufficient envy for people to say: "The atomtchiki live like kings."

The end of communism, the cuts in the state budget, and the inflation which eats away at salaries have changed this relatively idyllic picture. Now Moscow's stores offer a much more tempting cornucopia than those of the "closed" cities. A scientist's income, 300-500 rubles a month, is now close to the national average; and moreover it is paid several months late—an unwelcome and unfair practice, but one common to all public employees in Russia. It is the fault of the crisis. It is no longer a privilege to live in one of the "closed" cities. It is a sentence. The Nuclear Archipelago is starting to appear to its inhabitants like a gulag. They need more and more to grow potatoes in their allotments. And they need, and want, more and more to leave.

Prime Minister Chernomyrdin has already rushed to Artsamas 16 once in order to quell a strike: Nobody in the city had been paid their wages for months. On another occasion 36 Artsamas 16 scientists were stopped at Moscow airport as they were trying to board a flight for North Korea, where fabulous contracts awaited them in exchange for nuclear know-how. And throughout the summer there have been constant reports of Russian workers, technicians, and engineers discovered trying to sell uranium rods or bars of plutonium around Europe. Apart from the case of the "harmless" 9.5 kg, Moscow denies that the nuclear materiel comes from the "closed" cities. Not a single gram is missing, according to the Kremlin: "Everything is under control." We really hope so. But from a close vantage point, the impression is that a "no through road" sign is not enough to "close" the Nuclear Archipelago, unless its "islands" receive prompt wages and better living standards as soon as possible.

Commentary Views International Arms Sales

LD1409232494 Moscow Radio Moscow World Service
in English 1710 GMT 14 Sep 94

[FBIS Transcribed Text] In recent years many international buyers, formerly unfamiliar with Russian-made weaponry, have been increasingly turning to Russia for their defense hardware supplies. Our observer Vladislav Kozyakov comments:

A few days ago, when Russian and South African foreign ministers were talking in Moscow, an announcement was made public of both countries' intention to expand their links in the field of defense technology. Among other things, South Africa is pushing for a deal to replace the engines of its aging Mirage fleet with those mounted by Russians on their MiG's.

Coming hard on the heels was the news of Brazil's efforts to procure a several hundred million dollar-worth of Russian-made armor. Still further, Moscow and Seoul agreed last week to offset part of Russia's \$1 billion debt to South Korea with Russian-produced defense items, including tanks, armored personnel carriers, anti-aircraft missiles, and miscellaneous defense equipment.

These very days negotiations are being held in Moscow with a visiting Malaysian top brass delegation headed by General Ismail Amar, the army commander-in-chief. Coming under discussion are major trade deals to beef up Malaysia's ground forces with Russian-made armor, artillery pieces, and anti-aircraft missile systems. All that comes on top of the three month-old contract to augment the nation's Air Force by 18 MiG-29 fighter jets with a bunch price tag [as heard] of U.S.\$550 million.

Joining the queue of those anxious to draw on Russia's arsenals are now Turkey, Kuwait, and many other countries formerly totally dependent on the United States, Britain, and France for their defense supplies.

The buyers who obstinately deleted Moscow off their shopping maps are now getting used to defense cooperation with Russia. With the international climate radically changed, with hostile blocs no longer in existence, with Russia increasingly recognized as an agreeable partner, it is quality and other competitive dimensions that come to the fore. And it is exactly in this respect that Russian designers and arms producers are second to none.

Expert reports from recently held international exhibitions and air shows appear to hold Russian weaponry in very high esteem, with certain items considered exquisite. In Farnborough this year, Russia featured its latest Su-35 fighter bomber. A bit later, the London based DAILY TELEGRAPH quoted Western defense experts as dubbing it the best fighter plane in the world.

The high quality of Russian-made arms is now attracting those who until recently were denied access to Russia's defense produce. With freedom of trade and competitive pressures in their proper places, the buying side is the chooser.

Arms Sales Expected To Double By Year's End

LD1409222794 Moscow INTERFAX in English
1635 GMT 14 Sep 94

[FBIS Transcribed Text] Russia may double arms sales by the end of the year from \$2.2 billion in 1993, Viktor Samoylov, director-general of the Russian state company Rosvooruzheniye, told a news conference at the Farnborough air show in the UK.

In addition to the deal for supplies of MiG-29 war planes to Malaysia and a consignment of armored personnel carriers to Kuwait, Rosvooruzheniye and the MiG production complex are completing talks with India for modernizing MiG-21 planes.

Rostislav Belyakov, MiG Designer General, told journalists that a contract for modernizing 125 MiG-21 planes was under discussion. There are several thousand such planes in India. Belyakov said that modernization will enhance combat efficiency of each plane eight-fold with minimal expenditure.

Assessing the talks with China, which is interested in buying a large consignment of Russian multi-purpose

SU-30MK fighters (up to 42 according to some sources), Samoylov confirmed the interest shown by both sides in cooperation in this sphere. However, he said, the negotiations and drafting the contract were proceeding "with difficulty."

Samoylov said this was the result of the fact that "Russia has begun to assess realistically its technological potential and permits no price reduction for its products." This stand became firmer in Farnborough where Russia was the only exhibitor which displayed new military technology.

Samoylov denied allegations concerning talks with Pakistan for purchasing a large consignment of Russian SU planes. "We have some political commitments to India which are aimed at maintaining stability in the region which we are meeting strictly," said Samoylov.

According to Western information, Kuwait signed a contract for buying 60 armored personnel carriers and 27 Smerch jet systems this year.

German 'Agent' on Russian Radioactive Materials

944F1513A Moscow NOVAYA YEZHEDNEVNAYA
GAZETA in Russian 16 Sep 94 p 3

["Abridged" version of article translated from German by Aleksandr Chursin: "100 Grams of Plutonium Can Be Ordered in Germany Like a Stein of Beer": From an interview with an unidentified secret agent of the German police, provided by the magazine FOKUS exclusively for NOVAYA YEZHEDNEVNAYA GAZETA]

[FBIS Translated Text]

Question: Some public figures believe that secret police agents are promoting trade in radioactive materials, thereby creating an artificial nuclear market in Germany.

Answer: That sounds brazen. We do not procure anything we do not have at our disposal. The material is available and delivery depends more or less on demand.

Question: If it is so simple, why are secret agents necessary?

Answer: So that "the goods" do not reach the consignees. We must have access to the circles and control the situation.

Question: How quickly is it possible to get nuclear materials?

Answer: Uranium-235, for instance, or cesium-137 can be obtained within 48 hours. All it takes is a telephone call.

Question: And plutonium?

Answer: Within four weeks.

Question: What amount?

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Answer: One hundred grams. If more is needed I have to order it from the East [Eastern Europe or Russia].

Question: Does this mean that 100 grams of plutonium are already here, in Germany?

Answer: Yes, it is stored in secret bunkers. Such a storage facility is located in the vicinity of Dresden, in addition to which they are also situated in Austria, Switzerland, the Czech Republic, Poland, and Romania.

Question: Who controls them? Who are these nuclear merchants?

Answer: The military from the former Eastern bloc are behind the scenes right up to the rank of general, and, naturally, agents of the intelligence services—the Stazi [agents of the Ministry of Internal Affairs of the former GDR], as well as such agents from Prague, Bucharest, Sofia, and St. Petersburg. However, do not forget the nuclear scientists either.

Question: That is interesting. Which professors are secret traders in fissionable materials?

Answer: I will not give you any names, but in 1992-1993 they included scientific personnel at the Moscow Karpov Institute [most likely this refers to the laboratory at Arzamas-16, which is headed by Doctor of Sciences Karpov].

Question: Are these people known to the police?

Answer: Yes. Their names figure in German investigations.

Question: How can one get in touch with the criminal elements engaged in nuclear trade?

Answer: That is very simple. The main factor is money. If you have money, sooner or later you will make the necessary contacts. If you orient yourself right away in this environment, you will soon be meeting the real merchants in some out-of-the-way hotel.

Question: After the arrest of couriers with plutonium in Munich [in August this "commodity" in an amount of 500 grams was delivered from Moscow to Germany, creating a serious international scandal] the police established that the total shipment of the "commodity" was to have weighed four kilograms. Did you take part in this case in some way?

Answer: I had known both of the Spaniards and the Colombian arrested in Munich since the summer of 1992. That case involved delivery of osmium and "red mercury." I met with them several times in Switzerland and the police agencies of several federal regions were informed of that. In a similar manner information reached the criminal division in Munich, whose agents then located that group.

Delay in Destroying Chemical Weapons Causes Concern

*LD2609185794 Moscow INTERFAX in English
1750 GMT 26 Sep 94*

[FBIS Transcribed Text] The Russian State Duma's Defense Committee intends to hold a hearing on the

implementation of the chemical weapon destruction program at its October 11 meeting. Aleksandr Piskunov, deputy chairman of the committee, told Interfax that not a single bill on chemical disarmament had been tabled in the Duma. Nor has the International Convention on the Prohibition of the Development, Production and Stockpiling and Use of Chemical Weapons and on Their Destruction, signed by Russia on January 13, 1993, been submitted for ratification.

Piskunov said that the storage life of most kinds of chemical weapons had long ended. In the absence of legislation on the destruction of chemical weapons a national disaster of a scale larger than Chernobyl is likely, he believes.

He said that preparations for destruction of chemical weapons had started in 1986 when their production had stopped. A total of 40,000 tonnes of chemical weapons have to be destroyed. Piskunov said that 18.8 percent of the total were in the town of Pochev, Bryansk Region southwest of Moscow, 17.4 percent in the settlement of Maradykovskiy, Kirov Region east of Moscow, 17.2 percent in the settlement of Leonidovka, Penza Region southeast of Moscow, 15.9 percent in the town of Kam-barka, Udmurtia east of the Urals, 14.2 percent in the settlement of Kizner, also in Udmurtia, 13.6 percent in the town of Shchuchye, Kurgan Region, Southwestern Siberia and 2.9 percent in the settlement of Gorniy, Saratov Region on the Volga.

He said that the situation was most alarming in Kam-barka and Gorny where blister gas was stored in large tanks whose warranty had long expired.

Counterintelligence Service Examining List of Nuclear Smuggling Suspects

*LD2209124394 Berlin DDP/ADN in German
1140 GMT 22 Sep 94*

[FBIS Translated Excerpt] Moscow (DDP/ADN)—Russia's counterintelligence service is closely examining a list recently sent from Bonn containing the names of persons possibly involved in nuclear smuggling activities. Mikhail Dedyuchin, head of the department responsible for the security of strategic nuclear facilities, said in Moscow today that at least one of the persons on the list used to work at a nuclear plant. Others currently live in areas where nuclear plants are located and could well have contacts with plant personnel. However, no plutonium for the armaments industry is produced at these facilities, he said.

Dedyuchin added that no final conclusions can be drawn, as the list has not yet been fully assessed. He did believe, however, that the smuggling of nuclear material from Russia is being exaggerated by the western media. He stressed that most of the disappeared radioactive material involves isotopes unsuitable for the manufacture of nuclear weapons. [passage omitted]

Nuclear Materials Security Said Ineffective

94WP0155A Moscow ROSSIYA in Russian No 36, 21-27 Sep 94 (signed to press 20 Sep 94) p 4

[Article by Tatyana Piskareva: "Atomic Decay. More on the 'Nuclear Pilferers'"]

[FBIS Translated Text] The latest in a long line in our country of sundry embezzlers of state (formerly public) property that would remove from the enterprises everything—from motor vehicles to scrapers, inclusive—are now, evidently, the "pilferers" of nuclear raw material.

Some people are of the opinion that the fuss surrounding these events has been created artificially. The ordinary person concludes that the theft of nuclear materials is becoming habitual and that it is particularly easy to steal them here, subsequently ferrying them to customers overseas. Public opinion in a number of countries with an interest in the preparation of the appropriate soil for the legal manufacture of nuclear weapons is being shaped on the facts of the theft of radioactive raw material. Such, in any event, is the opinion of Yuriy Volodin, chief of the Office for Supervision of the Registration and Control of Nuclear Materials of the Gosatomnadzor [State Committee for Supervision of Nuclear Safety of Russia].

But the embezzlement cases, the investigations of which are not yet complete, have contained so much naivete and so many absurdities in the actions of the embezzlers that Chekhov's cautionary tale of the fellow unscrewing nuts at the railroad track comes to mind. Russian citizens, from whom three kilos of enriched uranium taken from the Chepetskiy Machine Plant (there could not in principle have been enriched uranium at this center, incidentally, inasmuch as it works only with natural raw material) were confiscated, were arrested this January. At approximately the same time, the recurrent three kilos of uranium were confiscated in the city of Elektrostal on the grounds of the fire-fighting unit of a mechanical engineering plant producing fuel for nuclear power stations, and in March two malefactors, once again with the fateful three kilos of uranium, were caught red-handed in the city of Pushkino near St. Petersburg.

The mystical three kilos wandering from charge sheet to charge sheet, and also the fact that on each occasion what was plundered was uranium-238 of a low degree of enrichment and incapable on account of this of being of any interest to weapons manufacturers, are nonplussing the experts. After all, not three but 25 kilos of uranium are required for a bomb. And uranium with a higher degree of enrichment.

That is, in order to assemble a bomb, some purchasers (of whom there were none, evidently) would require a huge, ultra-modern plant and tonnes of raw material in addition for processing into a highly enriched mixture.

Unfortunately, uranium is simply not the sort of product that can be passed just like that through a hole in the fence. That it has come to be removed little by little,

albeit by malefactors without due qualifications and theoretical training, is an eloquent indication both that Russia is utterly impoverished and that the military-industrial complex has cracked to its foundations.

The green-light period ended for the Ministry of Atomic Energy of Russia long since. Centralized financing has been forgotten. And the funds for weapons research are being allocated irregularly and sparsely. The defense order, which last year constituted 12 percent, will by next year have declined to eight percent. The average pay of specialists at the Ministry of Atomic Energy, incidentally, is lower than in the majority of other industrial sectors.

Two things make us particularly leery. First, the specialists are leaving—they are tired of recalling the forgotten privileged working and living conditions. Second, all the basic principles of work at enterprises of nuclear power engineering and industry have been violated: the careful selection of personnel, strong security, the utmost secrecy, restricted access to the "facilities." Retirees and incidental people sometimes earn extra money as guards.

An official program of the registration and control of nuclear materials has yet to be created. There is no law on atomic energy that is standard for the various departments of the system of control and protection, and the technical control facilities frequently fail to conform to modern standards. Unfortunately, the Goskomnadzor and the Ministry of Atomic Energy have yet to reach mutual understanding in the formulation of standards—the "Basic Requirements for the Registration and Control of Nuclear Materials" have been in development for six months now.

The presidential edict on the inspection of all nuclear-hazardous facilities was issued in April 1993. The Gosatomnadzor has as of this time inspected just about all of them. The preliminary results: The system of protection of the materials of the "first category" (highly enriched uranium and plutonium) is sufficiently reliable.

But what use is this, if the inspections and re-inspections amount mainly to work with documents. The search is not conducted as it would have been in Stalin's "establishments." And not as modern life demands. But simply, in bookkeeping fashion, on the lookout for a loss of materials according to their documented registration.

Representatives of the Gosatomnadzor acknowledge that, arriving at a "facility," they could not determine with certainty which container has nuclear materials. Pondering this without instruments is difficult.

Thoughts of the global disarmament of the former Soviet Union and, consequently, incredible nuclear granaries that have been opened somewhat most likely warm the heart of the nuclear "pilferers," both present and future. For this reason, the most reckless have begun little by little to snatch strategic raw material with the dexterity and avidity of a mouse stuffing its cheeks with cereal. And what if access also to the spent nuclear fuel storage,

which at Russia's nuclear power stations is close to overflowing, is simplified? Or they note the fact of the treaty on mutual strategic disarmament between the two superpowers, as a result of which approximately 500 tonnes of weapons-grade uranium and 100 tonnes of plutonium will be released in countries of the former USSR.

And these are, after all, not some miserable three kilos of uranium of dubious worth, but "high-grade" material for the filling of a bomb. How I hope that there is no swelling of the ranks of Chekhov's nut-unscrewing enthusiasts—but what if they, in their stupidity, set about stuffing their pockets with uranium?

FIS Spokesperson on Iranian Nuclear Arms Acquisition

*LD2709223494 Moscow ITAR-TASS in English
1937 GMT 27 Sep 94*

[Article by ITAR-TASS correspondent Mikhail Mzareulov and ITAR-TASS diplomatic correspondent Andrey Shtorkh]

[FBIS Transcribed Text] Washington September 27 TASS—Iran may create a nuclear weapon of its own within the next eight to ten years, CIA Director James Woolsey told a conference at the Washington-based Institute for Middle-east Studies. The text of his speech was circulated here on Monday.

According to Woolsey, development of nuclear arms is at the center of Iran's current military programme. Tehran focuses its attention on Russia, which it sees as a potential source of the main components of nuclear arms and finished nuclear arms per se.

Iran is actively involved in attempts to buy radioactive materials and technologies in Russia, he said.

Moscow September 27 TASS—"Russian Foreign Intelligence Service (FIS) has no information to prove that Tehran focuses its attention on Russia, which it sees as a potential source of the main components for the production of nuclear arms and finished products. Though FIS notes that Iran makes certain efforts to get an access to modern technologies, it cannot undertake to assert that it is a matter of military nuclear technologies," Tatyana Samolis, press secretary of the FIS Director, told ITAR-TASS on Tuesday.

FIS is informed about Iran's (and not only Iran's) growing interest in the high-tech field. But its interest is aimed at nuclear power engineering rather than military uses, she said. "We cannot quite understand, on what Mr Woolsey's assertions are based. Certainly, the CIA may have certain data about Tehran's intention to get down seriously to creating nuclear arms, and Russian intelligence may lack the data at present," she said.

"But, oddly enough, whenever a question is raised about abuses in the nuclear field (in certain countries), all eyes are fixed on Russia. Such was the case when contraband

plutonium was uncovered in Germany, though its origins have not been found out as yet. And that is what is happening today," she added.

"If Russian intelligence comes to know about Iran's intentions to make use of Russian accomplishments in the nuclear field with a view to implementing a programme for creating nuclear arms of its own, it will respond adequately. It is in nobody's interests to conceal such (evidence) and to pander to (such intentions)," she pointed out.

Chemical Weapons Destruction Concept Urged

*MM2809132194 Moscow IZVESTIYA in Russian
27 Sep 94 pp 1,5*

[Report by Viktor Litovkin: "Russia Lacks the Money to Destroy Its Chemical Weapons"]

[FBIS Translated Text] The subject which we are "uncovering" today is of immense importance not only for our country but also for the entire world community. One of the most acute problems for the State Duma returning from its recess could be the question of the Russian parliament's ratification of the International Convention Prohibiting the Development, Production, Stockpiling, and Utilization of Chemical Weapons and Their Destruction, signed by the foreign minister in January 1993. The main obstacle which could impede ratification of the convention, in my view, is by no means political or military, but financial.

Destruction of Russia's chemical weapons—and its total stocks are officially put at 40,000 tonnes—will need huge amounts of funding. According to specialist assessments the initial wave of work alone will cost around \$2 billion. Nobody in our country can currently say with complete certainty what the final cost will be. But there is a view that it will be comparable to the U.S. expenditure.

Experts I know are recalling that stocks of chemical agents in the United States total 30,000 tonnes; it was initially planned to allocate \$2 billion for their destruction. This figure then increased to \$5 billion, and now \$10 billion is required, and if the technology for destroying the weapons by incineration is rejected—something that American specialists are moving toward more and more—then the spending will hit \$15 billion.

We can assume that the cost will be just as expensive for Russia.

Lieutenant General Yuriy Tarasevich, deputy chief of the Russian Defense Ministry's Radiation, Chemical, and Biological Protection Forces for the elimination of chemical weapons, told me that before the combat toxins are destroyed, it will be necessary to have a statewide concept about how and why this is being done, and, of course, laws to oblige certain departments to constantly tackle this problem and to guarantee to the population of regions where the process takes place all kinds of benefits and comprehensive protection from even the slightest

hypothetical risk of being affected by proximity to the facilities where the chemicals will be neutralized and recycled.

So far Russia has no such law or concept.

Or, rather, the Defense Ministry has already elaborated a concept for the destruction of chemical weapons stocks. It has been coordinated with all interested ministries and departments and has even been signed by the premier. But until it has been ratified by a presidential directive it cannot come into force.

According to Gen. Tarasevich, two draft Russian Council of Ministers decrees on the creation of facilities for chemical weapons destruction in Kambarka (Udmurtia) and the settlement of Gornyy in Saratov Oblast have been drawn up and are being coordinated with all ministries, departments, and regions, and the "Law on the Destruction of Chemical Weapons in Russia" has been drawn up and submitted for examination to the government and the State Duma.

Another series of laws—on social concessions to the population of areas where facilities for the destruction of chemical agents will be built and operated, and on insurance and compulsory medical services for them, in addition, of course, to a law on tax breaks and other concessions for enterprises, their labor collectives, and private and foreign firms engaged in the destruction and processing of chemical weapons or taking part in their neutralization—is also being examined.

All these documents will be sent out to the regions on whose territory chemical weapons are stored and where it is planned to build facilities for destroying them. Representatives of the local administration, the public, and environmental movements have been included in various federal commissions, including government commissions.

The proposals from regions, ministries, departments, and other interested organizations will be examined at a session of the State Duma's Defense Committee 11 October, following the recess. In particular, representatives of the General Staff should appear and answer the question of whether the elimination of chemical weapons will weaken Russia's defense capability. The materials of the hearing and the conclusions drawn and recommendations made will then be sent for examination by parliamentary chambers and the Russian president. And only after this will the Russian parliament start its debates on the ratification of the international convention that was signed 13 January 1993.

"My opinion," Gen. Tarasevich told me, "is that chemical weapons need to be destroyed. And the sooner the better. Nothing lasts forever. Given that financial expenditure on safeguarding these weapons and on routine maintenance has now been sharply cut, we cannot guarantee that in a few years' time, there will not be a process whereby chemical shells and aviation bombs self-destruct—as happened to the Americans. Then, in the

event of a disaster, 10 times or 100 times as much money and effort would be required as we need now."

The general claims that, so far, the Russian military can ensure the complete safekeeping of organophosphorus toxins. And, although most aviation bombs and artillery shells have already outlived their guaranteed life—of 10 years—while some of them have been in storage for more than 15 years, there is still no particular threat of most chemical munitions' self-destructing. They are not fitted with fuses or detonators, and their steel cases are pretty strong. Once the necessary regulation maintenance has been done, the munitions can "last" at least five to 10 years.

But a decision on the blister agents stored at Kambarka and Gornyy Settlement in Saratov Oblast needs to be made right now. The actual means of storage—old steel tanks which, micron by micron, are becoming thinner with every passing year and cannot be transported anywhere; buildings that could collapse during natural disasters; and long storage periods for mustard gas, lewisite, and their compounds in the same place—all require immediate action and urgent funding, the general believes. Unfortunately, the military do not currently have the funds even to buy instruments to automatically monitor the condition of chemical agents.

Of the 114 billion rubles [R] allocated by the federal budget in 1994 for the destruction of chemical weapons, the military has received just...R6 billion.

A concept for the destruction of chemical weapons in Russia is currently on President Boris Yeltsin's desk.

This concept, we were told, includes information on the procedure for storing chemical weapons, their quantity, their current condition, their location, and, of course, Russian specialists' approaches to the problem of their destruction—how many facilities will need to be built where, what shape will they take, how much time will be required to get rid of certain types of agent; the timetable for their elimination; the cost of the work, and the procedure for funding it.

The funding includes sections on the cost of work safety, the construction of facilities and a social and production infrastructure, research and development, environmental and ecological monitoring, measures to protect the population's health, and many other issues. But the main point is that Russia will not just be getting rid of its chemical weapons but recycling some of these agents, reprocessing them into neutral reaction masses which will then be turned into useful production raw materials. First and foremost, this applies to lewisite, which, after neutralization by an alkaline solution and subsequent electrolysis, produces extrapure arsenic—a strategically valuable product for microelectronics.

It is not available in Russia. On the world market it costs around \$2,000 per kilo, and the "stocks" of arsenic contained in Russian lewisite are put by specialists are more than 2,000 tonnes against an annual requirement

by the country's industry of 15-20 tonnes. By developing an installation to process lewisite into industrial arsenic, scientists hope that the country will be able not only to meet its own needs but also to offer the product for sale on the world market.

The technology for the safe hydrolytic processing of lewisite into industrial arsenic was developed by Russia's State Scientific Research Institute of Chemical Technology on Moscow's Enthusiasts' Highway. An experimental installation able to handle 100-150 tonnes of lewisite a year is planned by Volgograd's "Giprosintez" Institute. It is to be set up in Saratov Oblast and will be tested there in practice.

After the lewisite installation and a second mustard gas and mustard gas-lewisite compound processing installation have been through research and development and start actually neutralizing chemical agents—and the tests are scheduled to take 18 months, until late 1996—a plant will be planned in Kambarka on the basis of the results. Its construction is scheduled for 1997. And, as of 1998, Russia will start destroying the lewisite stored there.

And the Russian Government believes that if the first stage—the destruction of the chemical agents, the creation of the necessary infrastructure around the elimination installation, and the provision of social concessions and security guarantees for the population—is shouldered by the state, the funding of the second stage could involve those with a direct interest in obtaining and selling arsenic on the Russian domestic and international markets. Namely—the administration of the regions where the installation will be built, local and foreign business circles, labor collectives at the processing plant, and representatives of science.

The experimental unit will cost around R20 billion. The government does not currently have enough money for it. And if local authorities, various firms and businessmen, and other interested parties are not involved in the process, the neutralization and reprocessing of blister agents could be delayed.

Admittedly, specialists are confident that, following the adoption of the necessary laws on the destruction of chemical weapons and the ratification of government decisions, the neutralization of mustard gas and lewisite and the funding of this process will nonetheless get off the ground.

The problem of the elimination of organophosphorus substances is more complex. The main obstacle is that there is no agreement from the regions to destroy them at their storage sites. (Agreement has already been obtained in Kambarka and Gornyy—V.L.).

The options are currently being examined. One of these is two-stage processing, as was proposed in Chapayevsk, but with further processing to more finely purify gases released into the atmosphere—neutralization followed by heat treatment. The second version is a single-stage technique which it is proposed to use only for isolated

dangerously unstable [avariyniy] munitions on special mobile units carried on rail platforms or truck chassis. And the third option is biodegradation using biological methods of neutralizing the toxins.

There are other proposals too. But so far there is no law on the destruction of chemical weapons, no presidential, parliamentary, or government decisions, and no money to carry it out—all these, as well as other issues, remain open.

Delegation Holds Talks in Tokyo on Arms Trade

*LD2909104394 Moscow ITAR-TASS World Service
in Russian 0231 GMT 29 Sep 94*

[By ITAR-TASS correspondent Andrey Varlamov]

[FBIS Translated Text] Tokyo, 29 Sep—Tokyo's attitude is positive toward the possibility of Russia getting involved in creating a new international system of streamlining arms and military trade, which replaces the export control committee (COCOM) disbanded after the end of the Cold War. Nor does it object to Russia joining the international system of control of missile technology.

This was stated in an interview with the ITAR-TASS correspondent by Anatoliy Antonov, departmental head of the Russian Foreign Ministry, who is heading the Russian delegation at the first official bilateral working consultations on export of military and dual purpose goods and technology, which ended in Tokyo today.

The sides also discussed prospects for joint work in the nuclear suppliers group, the activity of the so-called Australian group, which is engaged in problems of chemical and bacteriological weapons. In the course of the three day meeting, in which the Russian side was represented by officials from the Foreign Ministry, the prime minister's office, the Ministry of Foreign Economic Relations, and customs authorities, there was a presentation of Russia's export control system. A description was given of its legal basis, control lists, and licensing processes, as well as sanctions in instances when export control rules are broken. Our rules fully meet world standards. The control lists have been brought into line with the appropriate international export control practices, the Russian diplomat stressed.

The sides agreed that next year's consultations—the main task of which lies in the exchange of information—will be continued in Moscow.

Counterintelligence Service Denies Arms Smuggling Claims

*LD3009120094 Moscow ITAR-TASS World Service
in Russian 0916 GMT 30 Sep 94*

[By ITAR-TASS]

[FBIS Translated Text] Moscow, 30 Sep—In a telephone conversation with Sergey Stepashin, director of the FCS [Federal Counterintelligence Service], Minister of State Bernd Schmidbauer, the coordinator of German special

services, has deplored the way remarks he made were misinterpreted by journalists. Schmidbauer was referring to media allegations that during the withdrawal of forces from Europe representatives of the Russian Army illegally sold a large quantity of modern weapons to Serbia. The German representative noted that neither he nor German special services had any information of this kind. The telephone conversation is reported in a statement issued today by the FCS public relations center.

The statement also says that during their visit to Germany a FCS delegation and the German side discussed coordination of efforts by both countries' special services to prevent the smuggling of nuclear materials, weapons, and drugs and to tackle organized crime. However, the Germans did not raise the question of illegal Russian arms sales to third countries. No evidence of such a thing was handed to the Russian side.

The Defense Ministry regards allegations in the German newspaper BILD AM SONNTAG and other media claims that equipment and weapons belonging to Russian forces in Eastern Europe were smuggled to Serbia and Syria as a complete fabrication. A statement issued today by the ministry's press service says that "all weapons and combat equipment from the Western Group of Forces and groups of forces in other East European countries were withdrawn to the USSR and then to Russia."

KAZAKHSTAN

Accord Signed With Japan on Nuclear Materials Controls

OW0609105094 Tokyo KYODO in English 1027 GMT 6 Sep 94

[FBIS Transcribed Text] Tokyo, Sept. 6 KYODO—Japan signed an agreement with Kazakhstan Tuesday [6 September] on providing support for the former Soviet republic's efforts to establish a system to control nuclear materials, the Foreign Ministry said.

Japanese and Kazakhstan Government officials signed the accord in the Kazakh capital of Almaty, the ministry said.

Under the accord, Japan will provide necessary equipment and exchange experts to help establish a control system for nuclear materials in Kazakhstan.

Kazakhstan is one of the four Soviet republics that inherited nuclear weapons when the Soviet Union collapsed in 1991. It joined the nuclear Nonproliferation Treaty (NPT) this February.

The country needs equipment and expertise to meet safeguard obligations by the International Atomic Energy Agency (IAEA), the ministry said.

Japan will provide the assistance using the 1.17 billion yen it has disbursed to a Japan-Kazakhstan committee on dismantling nuclear weapons in Kazakhstan.

The committee, consisting of representatives of the Governments of Japan and Kazakhstan, was set up following a bilateral agreement last March to cooperate in destroying nuclear weapons in Kazakhstan.

UKRAINE

Moroz Pledges Accession To Nonproliferation Treaty

LD0809170894 Kiev UNIAN in Ukrainian 1435 GMT 8 Sep 94

[FBIS Translated Text] Kiev [no dateline as received]—Supreme Council Chairman Oleksandr Moroz will visit the United States tentatively on 10 October 1994, he told a meeting with American congressmen, led by Senator Patrick Leahy, chairman of the Agriculture, Nutrition, and Forestry Congressional Committee, today.

Assessing how realistic it was for Ukraine's Supreme Council to ratify the Nuclear Nonproliferation Treaty [NPT], Oleksandr Moroz said that, in his opinion, the treaty will be ratified. However, "it should be improved since it is no secret that some countries acted in breach of it." The Supreme Council chairman underlined that the specific conditions under which Ukraine was to accede to the NPT should also be taken into consideration. "It cannot do this instantly for purely technical and economic reasons," he added. "In principle, I am in favor of ratification and even it being sped up. I am also in favor of the UN General Assembly session raising the issue of engaging the largest possible number of countries in nuclear disarmament. We handed to the United Nations our proposals on this, and also on the need to take account of the specific conditions Ukraine is in," said Oleksandr Moroz.

The Supreme Council chairman also emphasized the pressing necessity to form a Ukrainian-American inter-parliamentary commission to supervise the provision of U.S. financial assistance to Ukraine, as "many in Ukraine interpret the use of this assistance very liberally." This, in his words, does not at all mean that all assistance should only go through state channels.

Oleksandr Moroz said he feared that without this commission "the achievements of our cooperation will be made use of by those in possession of American capital." He said he would like this commission to be formed and officially registered prior to his visit to the United States. The Supreme Council chairman added that Ukraine was not asking for help but proposing cooperation which will also be beneficial to America.

Patrick Leahy replied that the process of assistance had slowed down primarily because Ukraine and America were building a totally new relationship, adding that the provision of assistance will be stepped up once privatization in Ukraine accelerates.

AUSTRIA

Blackmail Threat From 'Nuclear Terrorists' Viewed

AU1309130494 Vienna NEUE KRONEN-ZEITUNG
in German 13 Sep 94 pp 10-11

[FBIS Translated Excerpts] Just a few weeks ago, it seemed impossible that weapons-grade plutonium should be sold on the black market. That was a mistake, as the German secret service had to admit. Now, the Federal Office of Criminal Investigations and the Austrian State Police face a new threat: Blackmail by Russian Mafia nuclear terrorists, who are also looking at Vienna.

For months now, German investigators have been on the trail of four Eastern Europeans, who, according to information provided by an informer, are planning to blackmail the governments in Vienna and Bonn with radioactive contamination.

The Austrian State Police knows of a Russian-Turkish group that is planning attacks in several place in Austria, Germany, and Switzerland using explosive devices that release radioactivity on detonation. [passage omitted, general remarks on lack of security in Russian nuclear installations]

While Bernd Schmidbauer, the head of the German secret service, treats "the danger of nuclear contamination from blackmailers or terrorists" very seriously, Austrian State Police chief Oswald Kessler take a rather more relaxed view: "It is true that there have been rumors, but nothing concrete." He also believes that he is well informed about the smuggling of nuclear materials. Two weeks after the putsch that led to the final collapse of Russia, our State Police did actually establish a special department to deal with nuclear crime and thus responded more quickly than the Germans and the Swiss. Kessler: "Over the past three years, we have uncovered quite a lot of smugglers of nuclear materials and our record is better than that of most other European states."

All the cases involved what were evidently nuclear fraudsters: Their highly-enriched, weapons-grade material always turned out to be "radioactive junk."

However, that is exactly where the danger lies: If these "adventurers" do not find any purchasers, why should they not try to make big money by means of terror and blackmail?

The "radioactive junk" is easily suited for that....

FRANCE

Prime Minister Balladur on Defense, Nuclear Security Issues

BR0909143194 Paris LE FIGARO in French 9 Sep 94
p 6

[FBIS Translated Text] As long as it is, and remains, necessary for the preservation of our vital and strategic

interests, as long as it is necessary in order to ensure our security, France will continue to take its "defense needs" upon itself "by its own resources." And it is ready to bear the burden and cost of so doing. At the same time our country should to no less an extent seek to act in cooperation with our allies and partners "as often as possible." "And first of all in Europe, between Europeans." Presiding yesterday the opening of the 47th session of the IHEDN [Institute for High-Level National Defense Studies] at the Military Academy, the prime minister dwelled at length on these two complementary strands of a defense policy which constitutes, he said, a "constant concern of the government."

Basing his remarks on the White Paper and the Military Programming Law, Edouard Balladur was concerned to prolong and deepen the discussions begun in his recent FIGARO interview on France's place and rank in the world.

In this way the prime minister reaffirmed France's defense doctrine—his speech, which was communicated to the president's office, did not raise any objections of a strategic or constitutional nature—and made a few "European" proposals. In this special and essential political area, he remained true to what is one of the marks of his style of government: preferring "initiatives" and "action" as soon as the opportunity is there to be seized, to one consisting, for example, of fueling "theoretical institutional debates" with affirmations and declarations.

Proof of this pragmatism: his proposal to have the countries of Central and Eastern Europe take part in a reflection exercise by the ten Western European Union (WEU) members on European security and the "new conditions of strategic balance of our continent." The result could be "a veritable White Paper," which would be "a first manifestation of the new forms of solidarity which exist between the countries of the European Union and their immediate neighbors," in which one would find "the definition of a common doctrine in the field of security."

Avoiding Nuclear Proliferation

This "opening" would have to be accompanied by a "deepening," that is, "closer" cooperation between WEU members—"the central core of a future defense Europe"—in two areas in particular: armed forces and satellite observation. An initial objective which Europeans could set themselves could be "to be in a position to intervene together at short notice in the event of a humanitarian need anywhere in the world." This would involve "defining a genuine humanitarian policy for the European Union, which is currently lacking."

Constructing a defense Europe would in no way call into question the links of solidarity and shared values on which the Atlantic Alliance is based, and the vitality of which it is essential to preserve. However, this Alliance "is not omniscient. It should not prevent Europeans from existing as such within it, nor prevent them from

acting on their own, if they want to and are able." "Wanting to" and "ability." This will require time. Until such time, France should not relax its efforts if it wants, as Edouard Balladur would like, to continue to meet its international responsibilities, as in Yugoslavia, Cambodia, and, more recently, Rwanda: "Despite the strict budgetary imperatives imposed on all state departments, including the most essential, I can assure you that our country's defense policy will have all the resources which it needs."

In particular, there is no question of "diluting the foundations of our strategy." Nuclear deterrence, which covers only our vital interests—the definition of which lies with the president of the republic—constitutes "one of the most precious achievements of the Fifth Republic." "Be assured," Edouard Balladur said, "that it will be preserved and adapted as needed." If, as the specialists are telling us, one cannot "disinvent the nuclear sector," if it is necessary to preserve deterrence as an essential factor of stability in the world, we must "prevent nuclear proliferation, which would upset this balance and create a major crisis."

Also, as indicated by the prime minister, who until now had not yet expressed himself so clearly on the subject, France "is mobilizing" its efforts to obtain "the extension of the Nonproliferation Treaty (NPT) in May 1995 for an indefinite period and without preconditions." In addition, it "is an active participant" in preparing a total test ban treaty. "This treaty must make an important contribution to the nonproliferation effort, and for this reason must be universal and permit verification. It will be in addition to and will complete the system provided by the NPT, but its conclusion may in no event be considered as a precondition for the extension of the latter."

The UN Security Council needs to be more involved in this battle against the proliferation of arms of mass destruction. For this reason it is suggested that "a high-level official" be appointed to work with the secretary general to ensure the "political" monitoring of this key question. A final item of note from the head of government's speech: his reaffirmation of his attachment to the principle of the draft at the same time as the forthcoming announcement by the minister of defense of a series of measures aimed at making national service less unequal.

Article Plays Down Hazards of Proliferation

BR2909153194 Paris *LE MONDE* (L'ECONOMIE Supplement) in French 27 Sep 94 pp I, VII

[Jean Syrota article: "The True Dangers of Proliferation"]

[FBIS Translated Text] From the nuclear problems in Iraq and North Korea to the cases of Russian uranium and plutonium trafficking, the spotlight is currently focused on the military applications of the atom and the sometimes dangerous liaisons they may have with the

electronuclear industry. Consequently, it is necessary to clearly distinguish the reality of the facts from the irrational fears, to ask the right questions, and to start proposing solutions for tomorrow, today.

To shed some light on the subject, it may be useful to review how, over the past few years, a number of countries have gotten hold of—or tried to get hold of—nuclear weapons: Those which have been mentioned for a long time now, i.e., India, Israel, South Africa, Pakistan; and those which have been in the news more recently, i.e., Iraq and North Korea. Some have tried to produce military grade uranium with the help of a clandestine enriching workshop and others have tried to produce military grade plutonium by discreetly extracting lightly irradiated fuel from a reactor and reprocessing it in a clandestine workshop.

It is known that uranium and plutonium comprise several "isotopes," some of which are fissile and others not. Military uses require a high degree of isotope purity, more than 90 percent of fissile isotope (U 235 for uranium and Pu 239 for plutonium). Now, the uranium and plutonium used in the nuclear electric industry are a long way from having these characteristics.

The uranium used as fuel in light water power plants is obtained by enriching natural uranium's content of U 235—up to around 4 percent. Natural uranium contains 0.7 percent U 235 and 99.3 percent U 238. Plutonium is continuously created during the operation of any nuclear reactor using uranium fuel. It is separated during the fuel reprocessing operations.

Its content of the 239 isotope is closely linked to the way the reactor is operated and the time during which the fuel from which it is extracted has remained in the reactor. Indeed, in itself, uranium 238 is not fissile and consequently does not produce energy. It therefore has no explosive use (Footnote 1—The fact that 9.5 kg have been stolen recently hardly deserves the media coverage it has received. As this has already happened often, this uranium is probably the bait for a "sucker" thinking he is secretly buying nuclear material for military use). However, within the fuel and bombarded by neutrons, it produces first fissile plutonium 239 and then—as the nuclear reactions development—other, non-fissile plutonium isotopes appear.

Electrical engineers are seeking to obtain the most electricity possible by using up the fuel's maximum energy potential. Consequently, this means they unload it from the reactor after it has been in there for several years. The plutonium extracted at that point is relatively rich in non-fissile isotopes (more than 20 percent plutonium 240). It is also more radiant and more delicate to handle. To obtain military grade plutonium, however, it must be extracted from fuel that has only spent a few days in the reactor. This involves operating the reactor in a totally different manner. To round off this technical explanation, let us return to three points of interest in the use of plutonium. Some statements made by the Americans

reported an experiment carried out in 1962 using civilian plutonium in a military explosion. The isotopic composition of this plutonium was not published, but the information known on the subject would indicate that this plutonium—coming from graphite-gas uranium reactors—was, bearing in mind the date of the experiment, certainly subjected to a very low level of irradiation and therefore very close to military grade. It is quite clear that a reactor is closer to being a "proliferator" if it allows the unloading at any time of fuel that has been lightly irradiated. The recent problems raised by North Korea are a good example of this. The International Atomic Energy Agency (IAEA), which is the UN body responsible for the international inspection of civilian installations, has continually tried to accurately verify how the fuel was unloaded in order to verify how much time it spent in the reactor. The U.S. government is urging North Korea to use standard light water electro-nuclear reactors which require an easily detected shut-down in operations in order to unload the fuel. Plutonium is, of course, an extremely toxic product, but not to the terrifying extent sometimes described. More than 4 tonnes of plutonium have been dispersed during nuclear tests in the atmosphere. If it were true, as can sometimes be read, that 300 grams of plutonium released into the air can kill millions of people (NEWSWEEK, 29 August 1994), then the population of the planet would have perished several times over.

There are other substances that are more toxic than plutonium. For example, one microgram of botulin toxin (the toxin found in rotten canned goods) ingested kills within hours, as does a milligram of nerve gas inhaled. The toxicity of plutonium when ingested is relatively low. It is very high when inhaled, with a lethal dose of 50 milligrams. But that is on the same order as nicotine or strychnine (rat poison). Its use for terrorist purposes should therefore be played down. There are many other substances that can be used for poison blackmailing, not only the substances used to make chemical and bacteriological weapons, but also the much more easily obtained chemicals used to fight animal and plant parasites.

Inevitable Restrictions

It should be said that not only do the physical characteristics of civilian grade material make it unsuitable for use in weapons, but also that the conditions under which these materials are inspected is an extra obstacle to any attempt to steal them. The guarantees are all the more effective since the need to combat proliferation is something that is well understood by the nuclear industry.

In contrast to a widely held idea, the long-term interests of the nuclear industry are not linked to the development of military programs. They are linked, however, to the policy of non-proliferation. There is no question of denying the crucial role played by the spin-offs from military programs in the initial developments of the civilian industry. However, military programs, which have held an important place in the activities of the

nuclear industry, do not have the prospect of growth, quite the contrary. On the other hand, any irrational fears which the public may have in seeing civilian programs give birth to military programs can harm the development of a source of primary energy which is competitive and respects the environment. All the nuclear industry is asking is that the conditions or restrictions placed on the international nuclear trade, and which are inevitable in the interest of non-proliferation, be justified, clearly defined, and stable.

The final result of the fight against proliferation since the NPT [Nuclear Non-proliferation Treaty] came into existence—i.e. more than 25 years ago—is clear, and it is easy to draw conclusions for the future: IAEA inspections have been effective in those installations subjected to them. No country has used plutonium from electro-nuclear light water reactors in explosives, or tried to produce weapons using materials and installations subjected to IAEA guarantees.

In other words, the facts make it clear that it is not the development of the civilian nuclear industry—and in particular the commercial reprocessing industry—which encouraged proliferation, but the uncontrolled use of continually loaded reactors, the dissemination of uranium enrichment technologies, and the trade in "sensitive" materials. Unlike what certain people predicted some 20 years ago, this proliferation has not led to the theft of electronuclear material inspected by the IAEA, but rather to the development of independent programs that are not subjected to inspection. Ending this would involve implementing the means necessary to detect and eliminate what is still escaping international control and what may exist in countries where the freedom of inspection and investigation by the IAEA is currently limited (Iraq and North Korea are good examples): i.e. the sporadic clandestine unloading of under-irradiated fuel to produce military grade plutonium, and the clandestine or uncontrolled activities of laboratories or small workshops making it possible to reprocess this fuel or enrich uranium.

All this should not make us forget that producing a nuclear weapon also requires the mastery of other technologies besides the production of nuclear material (conventional explosive, various materials, launchers, etc.) and especially a know-how requiring a lot of gray matter, a lot of time, and an enormous amount of money.

The Usefulness of Recycling

The reprocessing of used electronuclear fuel involves sorting the materials they contain with a view to separating out those which can be reused and reducing to a minimum the volume and toxicity of the waste to be eliminated. This is what all modern industries which respect the environment do, in the various sectors. We have to "sort and recycle." The only things that have to be stored indefinitely are the "waste of the waste," to repeat a couple of popular sayings.

This policy is in line with European Union rules on non-nuclear toxic waste. It is not understood why these do not also apply to nuclear waste. Article 4 of the EEC directive of 18 March 1991 stipulates that "the member states shall take the appropriate measures to give priority to promoting the prevention, recycling, and transformation of toxic and dangerous waste, the obtention from said waste of raw materials and perhaps energy, and any other method permitting the reuse of said waste."

Indeed, reprocessing makes it possible to separate out the elements of used fuel: three percent waste to be eliminated; 96 percent reusable uranium under conditions similar to natural uranium; and 1 percent plutonium to be used as a fissile material in a fuel called MOX (a mixture of uranium and plutonium oxides).

The alternative of eliminating all the uranium and plutonium along with the waste itself has the disadvantage of burying toxic plutonium in the ground. So far, such a procedure has only been the subject of a feasibility study and its exact cost could be much higher than the cost given in the theoretical studies. Unfortunately, it is quite normal in a number of areas to see the actual cost rise three times as high as the original planned cost. One recent example of this is the Channel tunnel. This is what is derisively called the "pi factor."

In any case, it is quite certain that in the long term with this type of storage, the plutonium will be harder to inspect and, if it is included in lightly irradiated fuels, will have a greater risk of being diverted for illegal uses than if it is in the form of a low-content mixed oxide in heavy MOX assemblies inside an operational civilian reactor. The Americans themselves are beginning to ask questions about the risks of proliferation in the long term represented by the mushrooming of these "plutonium mines," which would be considerably richer in energy-producing material than the world's best uranium mines.

This point takes on all its importance when we take a look at the future of military grade uranium and plutonium extracted from weapons to be dismantled. Indeed, today the fundamental question is much less one of fearing the military usage of plutonium produced by the civilian nuclear industry than of resolving the problem posed by existing weapons stocks which are not currently under the control of the IAEA. Indeed, while civilian plutonium can hardly be used in weapons, military grade plutonium can be used to generate electricity. The solution which would appear to be the best is to use the material from weapons for civilian purposes.

This is what is being done by the United States with the enriched military grade uranium bought from Russia. Diluted with lightly enriched uranium and transformed into oxide and fuel for light water reactors, it will produce electricity. We think that this is what should be done with plutonium, in a MOX fuel whose industrial use need no longer be demonstrated since it was first used more than 20 years ago and since EDF [French Electricity Company] currently burns this fuel in seven reactors.

This solution has also been recommended by the technical committee set up on this subject by the U.S. Department of Energy and chosen for study in a recent report by the U.S. National Academy of Sciences.

Similarly, knowing that Russian and American plutonium stocks are estimated at around 200 tonnes and that one gram of plutonium represents potential energy equivalent to more than one tonne of oil, one could conceive of recovering the equivalent of more than 200 million tonnes of oil, a not insubstantial savings equal to a little more than one year's production in the North Sea.

GERMANY

Intelligence Service Reports Details of Mideast Arms Involvement

AU2909093994 Hamburg DER SPIEGEL in German
26 Sep 94 pp 54-58

[Unattributed report: "Smoking Acid"]

[FBIS Translated Text] During a confidential round of the German Economic Committee at the German Bundestag, Konrad Porzner (Social Democratic Party of Germany) presented explosive documents. The president of the Federal Intelligence Service [BND] was quoting from a 154-page file of his authority.

The document, classified as strictly confidential, reports intensive efforts by individual Third World countries to develop nuclear, biological, or chemical weapons and attendant launching vehicles. What Porzner did not tell the Bundestag members was that Germany also participates in rearmament efforts, particularly in the Middle East.

The BND report contains new details of questionable German weapons exports. According to the findings of security authorities, deals are carried out in the form of foreign investments, cover companies, or the covered delivery of subcontractor products—or by other "conspiratorial ways."

The BND has observed that the "procurers are using new and more sophisticated methods to conceal their real intentions."

The investigators of the Cologne-based Office of Criminal Customs Investigations (ZKA) are currently intensifying efforts to monitor the export movements of German industrial goods. After the scandal of al-Rabitah, the gas factory that was sold to Libya by the Lahr entrepreneur Juergen Hippenstiel-Imhausen and other German companies, the ZKA was turned into an investigation office. "An increasing number of buyers of material that can be used for the production of weapons are active on the German scene," ZKA spokesman Leonhard Bierl stressed.

In Libya, for example, an underground plant has been built 65 km southeast of the capital Tripoli, near Tarhuna in the desert, since 1992. According to the Libyan

government, the two parallel tunnel systems are part of a national irrigation project ("Great Man Made River Project"). Ground water from the depths of the Sahara is to be pumped into coastal regions.

"The truth is that a second plant for the production of warfare agents is being established there," the BND believes because of the results of investigations by friendly secret services.

The Libyans apparently profit from German preparatory work. According to the BND, the new plant for the manufacture of various poison gases like mustard gas, sarin, or VX is largely being produced according to the old plans for al-Rabitah.

Asian experts are carrying out the required structural and underground engineering. Machines for underground engineering are "apparently procured from Germany via Thailand."

Thus, the company Westfalia Becorit Industriemechanik from Luenen in Westphalia sold two tunnel millers to the Thailand company W&M Limited. A little later, the device was used in Tarhuna, Libya according to satellite investigations by intelligence services. Two 150-meter long parallel tunnel systems have in the meantime been milled for the warfare agent factories at the foot of a limestone mountain.

According to BND investigations, more "critical parts" are coming from Italy and Switzerland: Racking plants, electronic control instruments, mixers, gas washing plants, pumps, and centrifuges. These parts have been delivered to Libya, the BND claims.

According to U.S. secret services, special "air admission systems" and "decontamination products" for the tunnel project were ordered via the alpine republic. Since the original plans for Al-Rabitah were drawn in the usual DIN standard, "above all, countries that are producing on the basis of this standard are the target of procurement efforts," the BND reports.

Regarding the supply of raw material for their own chemical weapons production, Libyans can resort to high-quality work made in Germany. As early as 1987, it was discovered through the Hong Kong Imhausen subsidiary, Pen Tsao, how chemical primary products for warfare agents can be produced without attracting attention. Now production plants for Libya's oil production are apparently used for the weapons program. The example of Iraq shows the following: At the beginning of this year the Iraqi weapons industry Al Qaqa State Establishment ordered new parts for an illegal missile program. The propellant "smoking nitric acid" for Saddam's Soviet Scud-B missiles were to be procured via Egypt.

Since the end of the Gulf war in 1991, Iraq has been subject to the UN control program for weapons of mass destruction. Still, the BND suspects that Saddam Husayn is trying once again to increase the range of Scud missiles. Igniters for the deadly Scud warheads were

procured before the Gulf war through Rhein-Bayern-Fahrzeugbau, belonging to entrepreneur Anton Eyerle in Kaufbeuren.

"Nearly all production plants" for the enrichment of uranium that were discovered after the end of the Gulf war by UN controllers in Iraqi nuclear centers came "from Germany," the BND reports. Several former managers of the MAN Technologies in Munich as well as representatives of other companies—including H and H Metallform in Muenster or the Rhein-Bayern-Fahrzeugbau—continue to be suspected of being "essential agents or suppliers."

Iraqi plans for a self-developed gas ultra centrifuge, a piece of equipment to enrich uranium that is needed for atomic bombs, are apparently also based on German know-how. According to BND calculations, Iraq has purchased so-called dual-use goods (that can be used both for civilian and military purposes) for its weapons factories from a total of 300 companies worldwide. Four-fifths of all Iraqi scientists abroad are actually working as weapons procurers.

The current Iraqi weapons program is "difficult to assess," the BND analysis points out. One thing is certain: "Some of the material equipment" was excluded from the destruction of the Iraqi weapons arsenal ordered by the United Nations.

German investigators recently succeeded in confiscating a shipment of ammonium perchlorate, a propellant component from China. In ports in Sicily and in Jeddah, two consignments for Syria were discovered, including machines for a Scud factory.

The former enemy Iran is apparently also refilling its deadly arsenals.

The Iranians obtained a complete set of German drawings for al-Rabitah (Project Name: "Pharma 150") via Thailand a long time ago. In Teheran the high-technology purchases are being coordinated by the national defense Industries Organization.

Iran, for example, is interested in "complete fermentation plants" (BND) for the production of biological warfare agents. In February 1992 several explosives detonated at a company in Wald in Switzerland and a little later at a Munich forwarding agent that may have been planted by an Iranian opposition group. Three plants that were to be exported to Iran by the Swiss were heavily damaged.

Weapons exports from Germany are being marketed internationally. Countries like Brazil, Pakistan, Serbia, or Iran act as suppliers for nuclear, biological, and chemical weapons—with German assistance. Thus, with the help of a German subsidiary, 80 metric tons of missile propellant were exported to Iran from Russia via Ukraine to Libya by the Belgrade company Rudnap Export-Import.

Earlier, a Syrian company tried to procure important primary products for chemical warfare agent programs in the Middle East via India. A total of 25 barrels trimethyl phosphite put to the high seas in Bombay in August 1992. BND investigators stopped the ship in Cyprus.

Its name was "German Senator."

Text of Joint Declaration With Belarus

AU0909205894 Bonn BULLETIN in German
No. 77/5 Sep 94 pp 723-724

[FBIS Translated Text]

I. The FRG and the Republic of Belarus, henceforth referred to as the sides, agree that, for the benefit of their people, they will cooperate closely, thus contributing to peace in Europe and the world.

Both sides emphasize their commitment to the objectives and principles of the UN Charter, the principles and regulations of the Helsinki Final Act, the Charter of Paris for a new Europe, and the other CSCE documents. In particular, they emphasize the importance of the respect for human rights and basic liberties, and their obligation to build and develop democracy in their states as the only acceptable form of government.

II. Both sides will shape their relations consistent with international law, the respect for the sovereign equality of states, territorial integrity, the peaceful settlement of disputes, the renunciation of any kind of threat with force or the use of force, and the respect of human rights, and minority rights.

They confirm the right of all peoples to determine their fate freely and without outside intervention and to shape their political, economic, social, and cultural development according to their own wishes.

III. Both sides attribute high importance to the continuation of the arms control process for stability and peace of the entire community of states. On the basis of existing agreements on the limitation of conventional arms and personnel strengths and confidence-building measures and the ban of nuclear and other arms of mass destruction, in the interest of transparency and predictability, they intend to contribute to create security structures that are based on cooperation. They want to promote new kinds of cooperation in terms of security policy between the CSCE states. For this purpose, both sides want to make active use of the CSCE forum for security cooperation.

Both sides are committed to the policy of non-proliferation of arms of mass destruction and their launcher systems and advocate the strengthening of treaties under international law and international regimes on which international policy in this sphere is based. This applies, in particular, to the treaty on the nonproliferation of nuclear arms, which constitutes a pillar of the international administration of nonproliferation. Countries that are not yet members of the treaty

should join the treaty on the nonproliferation of nuclear arms as soon as possible. Germany attributes great importance to Belarus' consistent policy to achieve a nuclear arms-free status.

Both sides attribute high importance to the early commencement and implementation of the agreement on the ban on chemical weapons.

Both sides commit themselves to supply as complete information as possible to the UN register on conventional arms. They will be moderate regarding the trade in arms and armament goods. They will use the penal codes and their legislatures to prevent any cooperation for the development, production, or maintenance of arms of mass destruction. Bearing this in mind, Germany declares itself ready to cooperate with Belarus within the framework of its possibilities in the sphere of disarmament and to provide assistance for the development of national export control systems.

IV. Both sides will see to it that consultations are held at various levels on issues of common interest. They express their readiness to cooperate within the framework of international organizations of which they are or will become members.

In order to expand and consolidate friendly relations and cooperation between their two peoples, both sides will support the development of free and direct contacts between their citizens as well as between social and political organizations in both countries and promote partnership between regional administrative bodies at all levels.

In view of the particular importance of establishing mutual familiarity and consolidating mutual understanding between their peoples, both sides will simplify administrative procedures and facilitate the maintenance of such contacts within the framework of existing legislation.

V. Both sides attach special significance to the development of mutually advantageous economic cooperation. They are aware of the importance of creating favorable conditions for the development of industry, agriculture, infrastructure, and services in Belarus in accordance with free market rules.

Each side accords the companies and organizations of the other side the possibility of acting freely within the framework of current legislation and will promote diverse and close cooperation between Belarusian and German companies and organizations.

Germany is prepared to support Belarus in the development of its free market economy. To this end, both sides will make a particular effort to cooperate in developing the legal foundations for a free market economy.

Both sides are in agreement that the most important task of the cooperation council, which was founded in 1992, is to promote economic and business ties and to assist the reform process of effecting a transition to a free market economy in Belarus.

VI. Both sides attach great importance to the training and further training of skilled and managerial personnel in the economy. They are prepared to deepen and expand cooperation in this field.

VII. Both sides are in agreement that the expansion of financial relations between Germany and Belarus requires the participation of Belarus in a settlement of the debts of the former Soviet Union as well as in a multilateral settlement with creditors.

VIII. Both sides underscore the importance of providing legal and social safeguards for the reform process. Germany offers to share its experience and cooperate in the development and refinement of rule-of-law state structures in Belarus as well as to share its experience in the promotion of employment, social security, and social partnership, and thus make a contribution to the success of the reform process in Belarus.

IX. On the basis of common interest, both sides intend to cooperate in the field of environmental protection in a manner that takes account of ecological factors in the use of natural resources and to shortly provide a basis for this area in the form of an agreement.

Taking account of the 3 March 1994 memorandum of understanding between the government of the FRG and the Government of the Republic of Belarus on the promotion of cooperation in diminishing the effects of the nuclear reactor accident at Chernobyl, Germany and Belarus state they are keenly interested in continuing to cooperate closely in the field of protection from radioactivity and reducing damage caused by radioactivity.

X. Both sides are aware of the importance of research and development for the further economic growth of their two countries. Taking account of the 2 April 1993 Treaty on the Development of Extensive Cooperation in the Economy, Industry, Science, and Technology between the FRG and the Republic of Belarus, both sides express their readiness to activate cooperation in the aforementioned areas. In connection with this, they will support initiatives from scientists and scientific institutions aimed at further developing scientific and technical cooperation between the two countries, as well as support the exchange of scientific and technical information and documentation and of specialist and managerial personnel.

XI. Both sides state that they will seek to further develop cooperation in the field of culture, including education and science, and to conclude contractual agreements insofar as they are necessary.

Both sides will promote personal contacts between the citizens of both countries and the development of cooperation between cultural and scientific institutions, schools, colleges, youth associations, women's associations, parties, and trade unions as well as other social organization and associations within the framework of what is possible.

Both sides express their readiness to ensure that all interested persons have free access to the language and culture of the other side and to support appropriate state, social, and other initiatives.

The preservation and maintenance of the cultural artifacts of one side located on the territory of the other side are a natural expression of the new relationship between Germany and Belarus. Both sides are in agreement that the cultural artifacts of one side that are missing or have been removed illegally and find themselves on the sovereign territory of the other sides are to be returned to their owners or their legal successors. Talks on this subject are to commence as soon as possible.

XII. Both sides agree that citizens of the Republic of Belarus who are of German origin and are living in Belarus and German citizens of Belarus origin living in Germany shall be enabled to keep up their languages, culture, and national traditions and shall be allowed freedom of worship. Both sides confirm that the preservation of cultural identities and the realization of human rights play an important role in establishing friendly relations. Each side shall, therefore, enable and support the other side's measures to support these persons and their organizations.

XIII. Both sides express satisfaction at the agreement of 30 March 1993 concluded between the governments of the Republic of Belarus, Ukraine, the Russian Federation, and the Federal Republic of Germany on compensation to be paid to victims of Nazi persecution.

XIV. Both sides agree to give citizens of the other side free access to graves and to enable their preservation and care. Both sides will support the cooperation of organizations in charge of caring for war graves on the basis of an envisaged agreement on the care of war graves.

XV. Both sides intend to cooperate in fighting organized crime, international terrorism, and smuggling and unauthorized trading in narcotics and psychotropic substances through the authorities in charge and on the basis of the existing legal systems in both countries.

XVI. Both sides are in agreement that practical questions on the activities of their missions in Bonn and Minsk shall be solved as soon as possible.

XVII. Based on the fact that the Republic of Belarus is a successor state to the former Soviet Union, both sides agree that the international law agreements between the Federal Republic of Germany and the Union of Socialist Soviet Republics shall continue to apply in relationships between the Federal Republic of Germany and the Republic of Belarus until both sides agree on a different regulation in keeping with the law in each country. Both sides will commence talks on these subjects as soon as possible. [Dated] Oldenburg, 25 August 1994 [Signed] Dr. Klaus Kinkel, Uladzimir Syanko

Increased Cooperation With Russia on Nuclear Smuggling*LD2009172894 Berlin DDP/ADN in German
1634 GMT 20 Sep 94*

[FBIS Translated Text] Bonn (DDP/ADN)—Germany and Russia intend to continue to intensify their cooperation in combating nuclear smuggling. The two countries also want to cooperate closely in the future in acting against terrorism from the right and left and against organized crime and illegal immigration. This has emerged from a joint statement published by Bernd Schmidbauer, minister of state in the Chancellery, and General Sergey Stepashin, chief of Russian counterintelligence, at the end of their talks in Bonn today.

Stepashin heads a delegation which arrived in Bonn on Sunday. He told journalists that the 350 grams of nuclear material which were recently seized in Munich did not originate in a Russian plant. Schmidbauer declined to give any more details about this. A scientific analysis will now be undertaken. It is hoped this will lead to information on institutions which may have had the material in their possession.

Schmidbauer said he is confident they will cooperate successfully in combating nuclear smuggling. It became clear in the talks that arrests have been made in Russia and that material has been seized. There is also now more insight into the "buyer's market" for such material. The intention is certainly not to "pass the buck." Schmidbauer will soon be going back to Moscow to hold further talks. He was in the Russian capital at the end of August.

They agreed to undertake a joint initiative to improve multilateral cooperation in this sphere within the framework of preparing the next world economic summit of the G-7 states and Russia.

Kurt Schelter, state secretary in the German Interior Ministry, attended the talks. He is to hold talks in Moscow shortly on concluding a bilateral agreement to combat organized crime.

Siemens Presents Plan for Processing Russian Plutonium*AU2609204694 Hamburg WELT AM SONNTAG
in German 25 Sep 94 p 3*

[Report by Wolfgang Pollack: "Weapons-Grade Plutonium for Nuclear Power Plants"]

[FBIS Translated Text] Hanau—The 120 tonnes of weapons-grade plutonium that are stored in Russia can be turned into mixed-oxide (MOX) fuel rods by the Siemens company.

Siemens has now submitted a corresponding analysis at the request of the Foreign Ministry in Bonn, which Russia had contacted on this matter. Russia has suggested the town of Chelyabinsk as the site of an MOX facility like the one that is currently located in Hanau.

The Siemens study is also the subject of a NATO workshop from 16 to 19 October in Obnisk, in Russia, which, at the invitation of NATO, will also be attended by Juergen Krellmann, technical director of the Hanau fuel rod factory.

By turning the weapons-grade plutonium into MOX fuel elements, which are used in nuclear power plants, Russia wants, on the one hand, to ensure its energy resources in the long term and, on the other, to prevent the smuggling of plutonium. The costs for such an MOX facility, in which plutonium is mixed with uranium for fuel elements for nuclear power plants and is pressed into "tablets," are estimated at less than 1 billion German marks by Siemens.

"After a corresponding decision for construction, the facility could be put into operation in three to five years," expert Juergen Krellmann told WELT AM SONNTAG. According to the study, the 120 tonnes of weapons-grade plutonium could be processed in about 25 years. The fuel elements could be used in 10 to 15 light-water reactors in the Russian Federation and in the European Union for the production of electricity.

"Even if these fuel elements are used only once and not several times, the plutonium content is halved and the rest is practically no longer usable for weapons," the Siemens analysis says. The used MOX fuel elements could then be put into final storage—similar to uranium fuel elements—the experts conclude.

Furthermore, such a solution is far more useful than the U.S. plans, which envisage the vitrification of the Russian weapons-grade plutonium and subsequent final storage. So far, only one concept exists for vitrification—for research and development. Experts think that more than 10 years would pass before this process could be used in industry.

NETHERLANDS**Authorities Suspect Belgians of Nuclear Smuggling***BR2809120394 Groot-Bijgaarden DE STANDAARD
in Dutch 27 Sep 94 p 1*

[Report by Jeroen Wils: "Netherlands Suspects Belgians of Nuclear Smuggling"]

[FBIS Translated Text] The Control Department of the Netherlands Economic Affairs Ministry is conducting investigations into Belgian traders and companies suspected of nuclear smuggling. The enquiries is to examine the illegal import of radioactive materials into the Netherlands in the last two years, reports a spokesman from the Netherlands-based radioactive waste unit of Interpol.

Melis Visser, vice president of the Netherlands radioactive waste unit, says in an interview with DE STANDAARD that the databank of the Netherlands Economic

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Control Department, which investigates nuclear smuggling, contains the names of "several dozen" Belgians and Belgian companies suspected of selling radioactive materials in the Netherlands in recent years.

"In most cases these are so-called "brokers," dealers who are trying to sell cars one day, and nuclear materials the next," Visser says. The batches offered for sale vary from a few grams to several kg and consist of a variety of materials presenting a radiation risk: cesium-137, osmium, cobalt, enriched uranium, rubidium, and scandium.

The liaison officer at the Economic Control Department says that the Belgians are not among the most important smugglers, and that most illegal traffic originates in the former Eastern bloc countries. Visser believes the material comes from mines, hospitals, factories, and nuclear plants. Although the material appears unsuitable for nuclear power programs, those selling it believe they can earn a lot of money with nuclear waste by acting as a go-between for purchasers from third world countries.

Colonel Michiels, gendarmery liaison officer at the Belgian Interior Ministry, confirmed that in Belgium too a liaison structure is being set up between the police services, under the Justice Ministry. Michiels reports that the Interior Ministry has been receiving "alarm signals" in the past six months about nuclear smuggling in Belgium. The police services have been charged with collecting as much information as possible on illegal trade in radioactive materials. Michiels states that the police services investigated people suspected of nuclear smuggling in recent months but were unable to make any arrests.

The Nuclear Security Department of the Justice Ministry is being transformed into a specialized investigations unit whose responsibilities include combatting this illegal traffic. The competences of the Nuclear Security Department are being transferred to a Federal Agency for Nuclear Control which is still to be set up. This will come under the authority of the Public Health Ministry.

NORWAY

Insufficient Control Over Nuclear Trafficking Highlighted

BR2109141194 Oslo AFTENPOSTEN in Norwegian
14 Sep 94 p 3

[Per Andres Johansen report: "Authorities Under Strong Criticism—Radiactivity Without Control"]

[FBIS Translated Text] According to producers and sellers, the Norwegian authorities have poor control over the sale of radioactive materials. The reason is that radioactive substances can be bought without user permits. Radioactive sources are used in medicine, research, and industry.

Norwegian authorities also have poor knowledge of the origin of the radioactive substances. Radioactive materials, which have been bought cheaply in the East, are

being used in several places without permission or licences. Today, it is absolutely legal to sell radioactive materials to companies who do not have permission.

The control is so poor that some of the world's biggest producers are now giving the alert. They think that today's system is not securing a safe distribution of radioactive materials in Norway.

"We feel that we are walking on thin ice when we sell radioactive substances in Norway. We cannot obtain documentation which proves that whoever orders radioactive material have permission to do so," says Grete Vigen Rhode, daily leader of the Amersham company in Norway. "We have to follow a very unclear procedure when a new customer wants to order radioactive material. We do not know which isotopes they have permission to order or the actual amount of radioactive materials they have permission to store," says Rhode.

Illegal Import

AFTENPOSTEN has already revealed that illegal import of radioactive substances is taking place. The government's Radiation Protection Unit has come across at least two cases of illegal import of radioactive substances. Neither of these cases have had any consequences for importer or user.

It is, with today's rules, relatively easy for anybody to obtain radioactive materials in Norway. The government's Radiation Protection Unit has given permission to use radioactive substances over the telephone in several instances.

Threatened With Salestop

The control of distribution of radioactive materials is so poor that Amersham has earlier threatened to withdraw from the Norwegian offshore market. The government's Radiation Protection Unit has produced new regulations in this field after this threat.

False Certificates

Tonny Sundeng, leader of G. Hartman Ltd. is connected with sale and maintenance of radioactive products. The company has several instances where containers for radioactive substances have been used without permits.

"We have had several instances where poor equipment has been used with false certificates. We have made the authorities aware of this but to no avail," says Sundberg.

The government's Radiation Protection Unit is now working on new regulations for control of radioactive materials. It is not known when these come into action.

Minister Fears Norway To Become Smuggling Transit Country

BR2709143194 Oslo AFTENPOSTEN in Norwegian
22 Sep 94 p 4

[Report on interview with Norwegian Justice Minister Grete Faremo and Europol coordinator Juergen Storbeck by Ole Magnus Rapp in Kirkenes; date not given: "Faremo Concerned About Smuggling"]

[FBIS Translated Text] Kirkenes—The cabinet member [Justice Minister Grete Faremo] who visited South Varanger yesterday called for increased customs and police controls against Russian trawlers. She thinks it correct to use Navy ships for this purpose: "We must realize that smuggling of radioactive material is being carried out internationally."

Faremo fears that Norway can be used as a transit country for several types of organized crime between East and West: "The spread of crime is no joking matter. There is definitely a possibility for increased criminal activity in Norway. We want to prevent this by establishing close international police cooperation, first and foremost with EU's [European Union] newly established Europol," the justice minister said.

EU-border?

She visited yesterday what may become EU's border to the East. Grete Faremo and Europol coordinator Juergen Storbeck visited yesterday the border area in east Finnmark where Norway borders to both Finland and Russia. They examined the area carefully on this beautiful day. They visited customs posts, military border guards, and border police.

The Europol chief was satisfied with the border control: "This is one of the most secure borders I have ever seen. Border control has been taken seriously both on the Russian and the Norwegian sides. Police, customs, and the military seem to be cooperating very well," said Storbeck.

The justice minister did not expect the borders toward EU countries to be opened up immediately if Norway

says yes to membership: "Today's border controls will continue until other measures have been put into place. We depend on international intelligence information, among other things, in order to control what goes in and out of the country," she said.

Europol is a joint European police force whose aim is to combat organized crime. It is to coordinate national investigations and provide information. Europol is politically administered by all 12 EU member states and serves as a pool of resources for the member states and Norway has an observer status in Europol. Justice Minister Grete Faremo says as clear a yes to Europol as she does to EU membership.

Interpol

Norway is presently one of the 170 countries that cooperate within Interpol: "Europol is politically administered, which Interpol is not," Faremo said.

Europol has first and foremost concentrated its efforts on combating drug smuggling but can also be of assistance in fighting smuggling of people and radioactive material. Over the last six months Europol has provided assistance in about 250 international drug smuggling operations and has, among other things, revealed heroin smuggling from Nigeria to EU countries.

"The drug cartels are constantly looking for new routes to the European market. There has been an increase in drug trafficking between East and West and we are aware of the danger that Finnmark might become the gateway to Europe for drugs coming from Afghanistan via Russia," Juergen Storbeck said

Russia, Germany Draft Deal to Fight Radioactive Smuggling

*LD1909130294 Moscow ITAR-TASS in English
1134 GMT 19 Sep 94*

[By ITAR-TASS diplomatic correspondent Andrey Serov]

[FBIS Transcribed Text] Moscow September 19 TASS—Secret services of Russia and Germany are drafting a bilateral agreement on cooperation in fighting organized crime, drug trafficking and the smuggling of radioactive materials. The document is to become the legal basis for promoting practical interaction of Russian and German experts in repelling the growing threat of criminal world expansion, according to Aleksandr Lopushinskiy, counsellor of the European department of the Russian Foreign Ministry.

He told TASS on Monday that the document may be signed already this year at the level of foreign ministers or heads of the involved agencies.

"The absence of such an agreement resulted in the recent unjustified ballyhoo over the confiscation by the German Customs of plutonium from air passengers arriving from Moscow", Lopushinskiy said.

As the secret services of the two countries were not authorised to quickly exchange opinions on the problem, an information vacuum emerged which gave grounds for sensational inventions in mass media, the counsellor said.

The document which has been drafted for a long time will help avoid such situations, Lopushinskiy said and stressed, that in his opinion, the plutonium scandal did not darken relations between Moscow and Bonn.

Pakistan Wants To Buy 40 Mirage Jets From France

*AU2309110094 Paris AFP in English 1014 GMT
23 Sep 94*

[FBIS Transcribed Text] Paris, Sept 23 (AFP)—Pakistan is interested in buying 40 Mirage 2000-5 fighter-bombers from France, Defence Minister Francois Leotard said after a meeting in Islamabad with Pakistani Prime Minister Benazir Bhutto.

Bhutto spoke of Pakistan's "urgent need" for the planes and was anxious to visit Paris in the next few weeks to discuss details of the deal, believed to be worth about two billion dollars, Leotard aides said after the meeting Thursday, which lasted more than one hour.

Leotard himself quoted Bhutto as saying the acquisition of military aircraft was a "priority" for Pakistan.

On Wednesday, Leotard and Pakistani Defence Minister Aftab Shaban Mirani signed a billion dollar contract for three diesel-powered Agosta 90-B submarines and an unspecified number of sea-to-sea SM-39 missiles, successors to the Exocet.

Leotard aides said the exact amount of a Mirage deal had not yet been costed by the plane's makers Dassault, but that it would be around two billion dollars.

Pakistan had already concluded a deal with the United States for F-16 fighters and had made a down payment of 650 million dollars, but the contract was blocked by a US arms embargo against Pakistan.

Leotard aides also said Pakistan wanted to resume negotiations for the purchase of a nuclear power station from France.

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